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**Master Car and
Locomotive Painters'
Association**

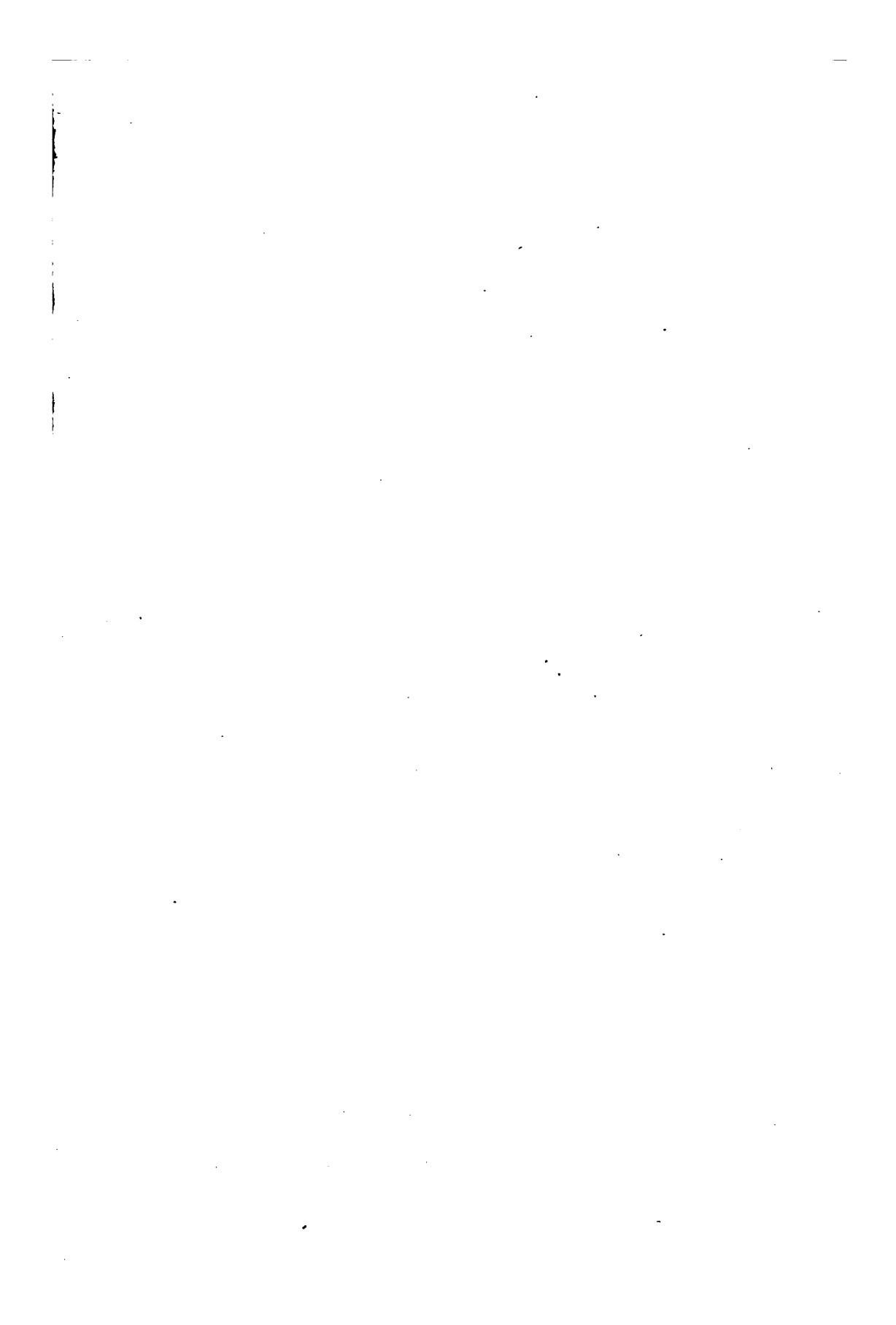
**PROCEEDINGS
THIRTY-SIXTH
ANNUAL CONVENTION
Cleveland, Ohio
SEPTEMBER
1905**

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PROCEEDINGS
OF THE
36th Annual Convention
OF THE
MASTER CAR AND LOCOMOTIVE
PAINTERS' ASSOCIATION
OF THE
UNITED STATES AND CANADA
HELD AT
CLEVELAND, OHIO
SEPTEMBER 12, 13, 14 AND 15, 1905

CORRECTED AND APPROVED BY THE SECRETARY

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1905

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LIST OF CONVENTIONS

OF THE

Master Car and Locomotive Painters' Association

No. of convention and where held.	Date.	President.
1 Boston, Mass.	Nov. 6, 1870.	Joseph Hill.
2 New York, N. Y.	Sept. 6, 1871.	Warner Bailey.
3 Cincinnati, O.	Sept. 4, 1872.	Jas. C. Van Pelt.
4 Chicago, Ill.	Oct. 8, 1873.	Geo. O. Widner.
5 Buffalo, N. Y.	Sept. 2, 1874.	M. W. Stines.
6 New York, N. Y.	Sept. 8, 1875.	M. W. Stines.
7 Philadelphia, Pa.	Sept. 20, 1876.	M. W. Stines.
8 Albany, N. Y.	Sept. 19, 1877.	S. E. Kirkpatrick.
9 Cleveland, O.	Sept. 18, 1878.	D. D. Robertson.
10 Detroit, Mich.	Sept. 10, 1879.	D. D. Robertson.
11 St. Louis, Mo.	Sept. 15, 1880.	D. D. Robertson.
12 New York, N. Y.	Sept. 21, 1881.	D. D. Robertson.
13 Chicago, Ill.	Sept. 20, 1882.	D. D. Robertson.
14 Baltimore, Md.	Sept. 19, 1883.	John Rattenbury.
15 Boston, Mass.	Sept. 3, 1884.	John Rattenbury.
16 Toronto, Ont.	Sept. 2, 1885.	F. S. Ball.
17 Chicago, Ill.	Sept. 8, 1886.	J. C. Stout.
18 New York, N. Y.	Sept. 13, 1887.	Samuel Brown.
19 Cleveland, O.	Sept. 12, 1888.	Samuel Brown.
20 Chicago, Ill.	Sept. 11, 1889.	A. E. Barker.
21 Boston, Mass.	Sept. 10, 1890.	Joseph J. Murphy.
22 Washington, D. C.	Sept. 9, 1891.	James A. Gohen.
23 Detroit, Mich.	Sept. 14, 1892.	W. O. Quest.
24 Milwaukee, Wis.	Sept. 13, 1893.	Wm. J. Orr.
25 Buffalo, N. Y.	Sept. 12, 1894.	W. T. Leopold.
26 Cincinnati, O.	Sept. 9, 1895.	Chas. E. Copp.
27 New York, N. Y.	Sept. 9, 1896.	Chas. E. Copp.
28 Old Point Comfort, Va.	Sept. 8, 1897.	Chas. E. Copp.
29 St. Paul, Minn.	Sept. 13, 1898.	Chas. E. Copp.
30 Philadelphia, Pa.	Sept. 12, 1899.	H. G. McMasters.
31 Detroit, Mich.	Sept. 11, 1900.	D. A. Little.
32 Buffalo, N. Y.	Sept. 10, 1901.	A. J. Bruning.
33 Boston, Mass.	Sept. 9, 1902.	A. P. Dane.
34 Chicago, Ill.	Sept. 8, 1903.	W. C. Fitch.
35 Atlantic City, N. J.	Sept. 13, 1904.	C. A. Cook.
36 Cleveland, O.	Sept. 12, 1905.	J. F. Lanfersiek.

List of Members

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- *Allen, A. L., N. Y. C. & H. R. R. West Albany, N. Y.
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- *Albright, Thos., Southern Ry. Sheffield, Ala.
- *Arlein, E. J., Chicago & Northwestern Ry. Chicago, Ill.
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- *Ball, Harry, C. W. & V. Ry. Columbus, O.
- *Bailey, Warner, Boston & Maine R. R. Concord, N. H.
- *Brunning, A. J., Louisville & Nashville R. R. Evansville, Ind.
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- Casey, John T., Pennsylvania R. R. Lambertville, N. J.
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- *Dyer, Wm. E., Boston & Maine R. R. Fitchburg, Mass.
- *Dorey, Richard, N. Y. C. R. R. Buffalo, N. Y.
- *Denny, C. S., Atlantic Coast Lines R. R. Wilmington, N. C.
- *Dalton, John, Southern Ind. Ry. Bedford, Ind.

*Dunbaugh, Geo., L. S. & M. S. Ry.....Collinwood, O.
 *Estabrook, W. H., D. L. & W. Ry.....Scranton, Pa.
 *Everist, A. C., Iowa Central Ry.....Marshalltown, Iowa.

*Fox, Louis, N. Y. C. & H. R. R.....W. Albany, N. Y.
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 *Hartley, John, Atchison Topeka & Santa Fe R. R.Topeka, Kas.
 *Hutchinson, T. J., Grand Trunk Ry.....London, Ont.
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 *Heisel, Fred., C. H. & D. Ry.....Cincinnati, O.
 Herron, H. C., Ohio Central R. R.....Kenton, O.
 *Hemach, E. A., Phila. & Camden Ferry Co....Camden, N. J.
 *Hoeffer, G. M., Brooks Loco. Works.....Dunkirk, N. Y.
 *Hengerveld, H., Atlantic Coast Lines.....Savannah, Ga.
 *Hibbard, W. E., B. & A. R. R.....Allston, Mass.
 *Haynes, M. J., Cambria Steel Co.....Johnstown, Pa.

*James, David, Pennsylvania R. R.....Oil City, Pa.
 Johnson, J. L., Denver & Rio Grande R. R.....Horton, Kas.
 Johanns, J. M., Buffalo, Rochester & Pitts. Ry.Rochester, N. Y.
 *Joyce, Wm. M., Baldwin Loco. Works.....Philadelphia, Pa.
 *James, Wm. T., Chi. Peoria & St. Louis Ry..Jacksonville, Ill.
 *Jackson, John A., Wisconsin Cent. R. R..N. Fond du Lac, Wis.

*Kahler, J. H., Erie R. R.....Meadville, Pa.
 *Kaulter, F., Chesapeake & Ohio R. R.....Covington, Ky.
 *Kelley, R. J., Long Island R. R.....Brooklyn, N. Y.
 Kell, J. G., L. S. & M. S. R. R.....Collinwood, O.
 Keller, F. E., John Stevens Co.....Elizabeth, N. J.

Kenyon, Alpha, Hannibal & St. Joseph R. R....Hannibal, Mo.
 *Kerr, F. E., Cleveland, & Pitts. R. R.....Wellsville, O.
 *Kunkle, J. C. F., Pennsylvania R. R.....Renova, Pa.
 *Kinsey, Geo. R., Baltimore & Ohio Ry.....Zanesville, O.
 *Koch, Edmund, Southern Ry.....Princeton, Ind.
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*Lord, Geo. W., Fitchburg R. R.....Fitchburg, Mass.
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 *Little, D. A., Pennsylvania R. R. (Juniata Shops) .Altoona, Pa.
 *Lynch, A. R., P. C. C. & St. L. Ry.....Dennison, O.
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 *Locke, Albert V., Brooklyn Rapid Transit Co..Brooklyn, N. Y.
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 *Looker, Jas., Wabash R. R.....Toledo, O.

McMasters, H. G., Southern Pacific R. R....Sacramento, Cal.
 *Mance, C. E., N. Y. O. & W. Ry.....Middletown, N. Y.
 *Mann, H. L., C. C. C. & St. L.....Urbana, Ill.
 *Mathews, Edward, D. Y. A. A. & J. Ry.....Ypsilanti, Mich.
 *Moxey, A. C., Standard Steel Car Co.....Butler, Pa.
 *Macomber, F. C., Pere Marquette Ry.....Muskegon, Mich.
 *Moore, John F., Erie R. R.....Cleveland, O.
 *Miller, A. J., Louisville & Nashville R. R...New Decatur, Ala.
 *Marsh, W. L., Western Ry. of Ala.....Montgomery, Ala.
 *Martin, J. C., Ill. Central R. R.....Paducah, Ky.
 *Mullendorf, Wm., Ill. Central R. R.....Chicago, Ill.
 McGee, D. C., Phil. Rapid Transit Co.....Philadelphia, Pa.
 *Mullally, T. J., The Armour Car Lines.....Chicago, Ill.
 *Miller, B. E., D. L. & W. R. R.....Scranton, Pa.
 *McMurty, Wm., Pitts. Loco. Works.....Allegheny, Pa.
 *Meek, John, Niles Car Mfg. Co.....Niles, O.
 *Murray, David, Pennsylvania R. R.....Pittsburg, Pa.

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 Nicoll, A. A., Northern Central R. R.....Baltimore, Md.
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 *Ottman, W. F., B. & O. Southwestern Ry.....Chillicothe, O.

*Poliquin, L., C. N. O. & S. P. Ry.....Ludlow, Ky.
 *Pitard, J. H., Mobile & Ohio R. R.....Whistler, Ala.
 *Pickford, Samuel, N. Y. N. H. & H. R. R....Readville, Mass.
 *Paulus, D. L., Barney & Smith Car Co.....Dayton, O.

*Quest, Wm. O., Pitts. & Lake Erie R. R....McKees Rocks, Pa.

*Russell, W. J., Grand Rapids & Ind. Ry...Grand Rapids, Mich.

*Rodabaugh, T. J., Pitts. Ft. Wayne & Chi. Ry...Ft. Wayne, Ind.
 *Rowe, W. S., C. St. P. M. & O. Ry.....Sioux City, Ia.
 *Robbins, Frank L., Central Vermont.....St. Albans, Vt.
 *Roscoe, John F., I. & Gt. N. Ry.....Palestine, Tex.

*Shuttleworth, J. B., Rutland R. R.....Rutland, Vt.
 *Smith, D. W., Pitts. Ft. Wayne & Chi. Ry....Allegheny, Pa.
 *Smith, J. C., C. C. C. & St. L. Ry.....Wabash, Ind.
 *Stroud, J. P., Allegheny Valley R. R.....Verona, Pa.
 *Stair, E. B., Central Ry. of Ga.....Macon, Ga.
 *Stevens, W. W., D. S. & S. R. R.....Drifton, Pa.
 *Skinner, Wm. M., Manhattan Div. Interborough Rapid
 Transit Co.....New York, N. Y.
 *Shore, Robert, L. S. & M. S. R. R.....Cleveland, O.
 *Siday, J. W., Atlantic Coast Lines.....Savannah, Ga.
 *Smith, E. A., Toledo & Ohio Cent. R. R.....Bucyrus, O.
 *Schumpp, Geo., Louisville & Nashville R. R...Louisville, Ky.
 *Stocks, John, Maine Central R. R.....Waterville, Me.
 *Swing, Geo., Pullman Car Co.....Pullman, Ill.
 *Sheerin, J. J., Pennsylvania R. R.....Logansport, Ind.
 *Stout, J. H., Balt. & Ohio.....Grafton, W. Va.
 *Smith, L. G., C. C. C. & St. L.....Wabash, Ind.
 *Smith, C. O., Bessemer R. R.....Greenville, Pa.
 *Stout, J. H., Balt. & Ohio.....Grafton, W. Va.

Truman, W. H., Carolina & N. W. R. R.....Chester, S. C.

*Vogel, Wm., Missouri Pacific Ry.....St. Louis, Mo.
 *Vorrge, J. N., D. L. & W. R. R.....E. Buffalo, N. Y.

*Wilkins, O. P., Norfolk & Western Ry.....Roanoke, Va.
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 *Wolter, Aug., C. I. & L. Ry.....Lafayette, Ind.
 *Woodruff, E. C., Pullman Car Co.....Pullman, Ill.
 *Weis, F. A., Central Ry. of N. J.....Elizabeth, N. J.
 *Watson, N. B., Great Northern Ry.....St. Paul, Minn.
 *Weaver, J. C., Chi. & Eastern Ill. R. R.....Danville, Ill.
 *Witterman, J., Illinois Central R. R.....McComb City, Miss.
 *Wynn, B. F., Pennsylvania R. R.....Pitcairn, Pa.
 *Wright, J. D., B. & O. R. R., Mt. Clare Shops..Baltimore, Md.
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 *Whittington, J. H., Chicago & Alton R. R...Bloomington, Ill.

*Younger, E. L., St. Louis & Iron M. R. R....Little Rock, Ark.

ASSOCIATE MEMBERS.

- *Aquart, A. D., Aquart's Eureka Compound.....St. Louis, Mo.
- *Aquart, E. L., Aquart's Eureka Compound.....St. Louis, Mo.
- Burtis, A. B., Mamolith Carbon Paint Co.....Cincinnati, O.
- Ball, Geo., Ball's Varnish Remover.....Allegheny, Pa.
- Conklin, Franklin, Flood & Conklin Co.....Newark, N. J.
- Fitch, W. C., Magic Specialty Co.....Sacramento, Cal.
- Hartshorn, Edwin, Western Ave.....Augusta, Me.
- *Hartnagel, J. F., Eureka Rubbing Co.....Chicago, Ill.
- Jones, Thos., care Canadian Pacific Ry.....Montreal, Que.
- *Koons, C. E., 4427 N. 20th St.....St. Louis, Mo.
- *Kissam, G. F., Murphy & Co.....Newark, N. J.
- *Kittridge, H. G., Kay & Ess. Co.....Dayton, O.
- *Lawler, T. J., Berry Bros., Varnish Co.....Detroit, Mich.
- Lucas, Barton, John Lucas & Co.....Philadelphia, Pa.
- McKeon, Robert.....Kent, O.
- McLaughlin, Edwd., 1242 Clay St.....Springfield, Mo.
- *Marshall, J. W., Detroit White Lead Co.....Toledo, O.
- *Marshall, Wm., Anglo-American Varnish Co.....Newark, N. J.
- Putz, John A., 32 Main St.....Fond du Lac, Wis.
- *Polk, W. A., Patterson & Sargent Co.....Cleveland, O.
- *Shannon, Chas., Lowe Bros. Co.....Dayton, O.
- Sipe, Jas. B., J. B. Sipe & Co.....Allegheny, Pa.
- *Taylor, H. G., J. B. Sipe & Co.....Allegheny, Pa.
- *Vall, D. B.....Buffalo, N. Y.
- *Wolfe, W. D., Wolfe Brush Co.....Pittsburg, Pa.

HONORARY MEMBERS.

- *Brazier, F. W., Asst. Supt. Rolling Stock, N. Y. C. & H.
R. R.....New York, N. Y.
- Bartlett, Henry, Supt. M. P., B. & M. R. R.....Boston, Mass.
- Chamberlain, J. T., M. C. B., B. & M. R. R.....Boston, Mass.
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.....Indianapolis, Ind.
- Lentz, J. L., Asst. Supt. M. P., Lehigh Valley R. R.
.....Bethlehem, Pa.
- La Rue, Henry, M. C. B., C. R. I. & P. R. R.....Chicago, Ill.
- Marden, J. W., Asst. M. C. B., B. & M. R. R.....Boston, Mass.
- Parish, L. G., M. C. B., L. S. & M. S. Ry.....Englewood, Ill.
- Quayle, Robt., Supt. M. P. & Mach., C. & N. W. Ry.
.....Chicago, Ill.
- Schroyer, C. A., Supt. Car Dept., C. & N. W. Ry.
.....Chicago, Ill.
- Thompson, W. O., Div. Supt. of M. P., N. Y. C. & H. R.
.....Oswego, N. Y.
- Tinker, J. H., M. M., B. & O. R. R.....Garrett, Ind.
- White, W., M. M., L. E. & W. R. R.....Lima, O.

Those marked with a (*) were present at the convention.

PROCEEDINGS
OF THE
Thirty-Sixth Annual Convention
OF THE
Master Car and Locomotive Painters'
Association
OF THE
UNITED STATES AND CANADA

HELD AT THE HOLLENDEN HOTEL, CLEVELAND, OHIO,
SEPTEMBER 12, 13, 14, 15, 1905

The Thirty-sixth Annual Convention of the Master Car and Locomotive Painters' Association of the United States and Canada was called to order by President John F. Lanfersiek, of Columbus, Ohio, at the Hollenden Hotel, Cleveland, Ohio, September 12th, 1904, at 10:30 o'clock a. m.

The proceedings were opened by the singing of "America," which was joined in by the entire assemblage, after which a prayer was made by the Rev. Robert B. B. Foote, Assistant Rector of Trinity Church, Cleveland. After a humorous recitation by Mrs. Lynch, entitled "Mrs. Casey on Lawn Tennis," President Lanfersiek introduced Mayor Thomas L. Johnson, in the following remarks:

PRESIDENT LANFERSIEK: We have with us this morning the Mayor of this great city, who I know will be pleased to talk to you. I now have the pleasure of introducing to you the Hon. Tom L. Johnson, Mayor of the City of Cleveland, who will now address you.

Mayor Johnson was greeted with loud applause, and addressed the convention as follows:

MAYOR JOHNSON: Mr. Chairman, and ladies and gentlemen of the Master Car & Locomotive Painters' Association. It has frequently been my pleasure, and one of the duties of my office that does not give me any trouble, to meet and welcome to the city delegations similar to this. In the Mayor's office there are a good many disagreeable things to do. I

have frequently unpleasant disputes to settle, and I always look upon this as a relief from the ordinary work—to come forward and meet the various delegations that come to Cleveland. I am proud and happy to say that our people are anxious to encourage these meetings, not that we want particularly your presence here that you may spend something here; but we want especially the chance to meet people from other parts of the United States and Canada. We profit by that. We profit by getting a broader view of the general subjects that you deal with; for instance, in your meeting here now it is not all social; you cannot help but drop some little hints that will help our own people. I do not know that the painting trade is any different from the others. They all have their peculiarities. We have a great variety of meetings here. We had the veterinarians not long ago, who came here to criticise the "automobile town" as destroying their trade. We have doctors of various kinds meet here. But painters,—I presume theirs is a science of trying to cover up dirt, isn't it? We probably need that here as much as anywhere else. (Laughter.) But aside from joking on the subject, my friends, I am glad to welcome you on behalf of the city of Cleveland, and extend to you the courtesy of our city, and, so to speak, I give you the keys to the gate. Though we have a dingy old court house on the other side of the street—which we expect to improve some day—we welcome you all there, and if you drop into the City Hall, I will promise you that every member of the city administration, and the heads of the departments, will do everything they can to be polite to you and make your stay interesting. Above all, I hope that you will have such success and enjoy your stay so much that you will be encouraged to meet here again. (Applause.)

PRESIDENT LANFERSIEK: I will now ask Mr. Gohen to respond to the Mayor's address.

MR. GOHEN: Your Honor, Mr. President and ladies and gentlemen: We thank your Honor very kindly for your encouraging words to us, and we assure you that if you had no more onerous duty to perform than greeting the Master Car & Locomotive Painters' Association, I say to you that you would have a happy time, and would be living in a bed of roses as the Mayor of the city of Cleveland. As you say—and I presume it is true—a great many associations meet here of different kinds—as you say, the veterinarians, and the painters, they have come to exchange ideas and to broaden their views. That is the object and aim of our Association. We meet every year just about this time in the year to exchange our views upon subjects which we are engaged in by the railroads of this country. We think, Mr. Mayor, that you ought to have a little bit of interest in this Association yourself, because you are a street-car man and have been known as a great street-car man in this section of the country. Down in the nice little town of Indianapolis, where I happen to be located, I think you ran a little street-car line there, and if I am not mistaken, you installed that little car in Washington, Illinois, and I think you were the first nickel-in-the-slot man in this country there, where they used one of

those bob-tail cars. Every passenger used to come up and put a nickel in the slot that would run down the front.

MAYOR JOHNSON: We have some left yet.

MR. GOHEN (continuing): Well, Mr. Mayor, we are glad to meet in Cleveland. I come here myself on stated occasions and have for a number of years, and I have always enjoyed my visits here. When our people were casting around last year at Atlantic City for a place to meet they seemed to center upon Cleveland as being the next place. I do not know what actuated them in doing it. I presume they wanted to see the great city that had two representative men living within its borders—one, the Governor, and the other, the Mayor. This town is also noted as the home of other great people. The great John D. Rockefeller lives here, and the greatest financier ever known in the United States, almost, lives here—Mrs. Chadwick. (Laughter.)

MAYOR JOHNSON: She is respectable since the Equitable case came along.

MR. GOHEN (continuing): I was not speaking of companies, but was speaking of individuals. But I trust our meeting here will be all that his Honor expects it to be, and that we expect and hope it will be. I hope you will have a nice, pleasant time, and when we go away we will not be sorry for having had the honor of Mayor Thomas L. Johnson coming to give us a greeting on this occasion. (Applause.)

President Lanfersiek here delivered the following address: Ladies and Gentlemen:

We have had an exceedingly warm welcome to this great city by its genial and affable chief magistrate, Tom L. Johnson.

It is now my privilege as well as my duty to welcome you to this, the Thirty-Sixth Annual Convention of the Master Car and Locomotive Painters' Association of the United States and Canada.

It is pleasant indeed to meet together once a year in social and business intercourse, renewing old friendships and forming new ones.

How thankful we should be that an all merciful providence has permitted us to assemble here.

We come together as friends, and during our sojourn here we should apply the Golden Rule, "Do unto others as you would have others do unto you."

To the ladies who have come, anticipating many pleasures, I again say welcome; yes, thrice welcome, and it is hoped your anticipations will prove true.

I regret to announce the death of Mrs. W. J. Byrne, who passed away on June 16th at Richmond, Va. She was, with her husband, W. J. Byrne, a regular attendant at our conventions and I know she will be missed by all.

To our friends, the supply men, who have so largely contributed to the pleasures of our previous conventions, I extend a hearty greeting and welcome.

To the members of the association, gentlemen. On looking back to our last convention it seems but yesterday since we packed our grips and left Atlantic City for our respective homes, and yet a year has passed.

This flight of time should admonish us that our lives are rapidly slipping away and we barely have time to think of the future before it is upon us.

Our lives are short at best and it will be only a few short years until all of us will be gone, therefore, it behooves every one of us to think and prepare for the great beyond.

Although the year has passed rapidly away our respective countries have been blessed with plenty and made substantial progress. I know the members of this association have shared in that progress.

This Association is now thirty-six years old. It has made some progress each year and I firmly believe it is better fitted to do the work assigned it now than ever before.

I hope that, when we get down to business, we will all do our utmost to make this convention a success. It is expected that all of the members will be in their seats promptly at the opening of each session and take part in the business. It is your duty to do so. The pleasures of the convention can be participated in by all after the sessions are closed.

I attended the meeting of the Advisory Committee in New York last February. The subjects chosen are all good and we expect the members will be highly entertained and enlightened by hearing many good papers read and discussed.

I have had no report from the chairman of the Test committees, but expect it will be ready when called for.

We have lost two members by death during the past year. Mr. Henry Laidler, who died December 11, 1904, and H. A. Dumbaugh, who died May 13 of this year.

Suitable action, by the proper committee, will be taken in due time.

In conclusion let me say, we are here as friends and brothers of a noble craft. Therefore, let us prove ourselves to be men among men and assist each other to bring about results that will raise our association to a higher plane and redound to the benefit of the great corporations by whom we are employed.

I now declare the Thirty-Sixth Annual Convention of the Master Car and Locomotive Painters' Association of the United States and Canada open for the transaction of business.

PRESIDENT LANFERSIEK: Before the ladies retire, I would be pleased to call upon Mr. Brazier, who will now address you.

Mr. BRAZIER: Mr. Chairman, I do not know why you say "before the ladies retire." I think, perhaps, it would be better for the ladies to retire, for I feel a little in the spirit of saying a few plain things to you painters. In the first place, you may wonder why I am here, as I am not a painter. I am a good deal like the darkey down in the Methodist church. They held a great revival, and they were trying to get him forward to the anxious seat. The preacher said, "Come forward and join the Lord's army." He got a few forward, and he says, "If you don't come pretty soon, I'm going to call names out!" He had one particular man he wanted to get, and he said, "Brother Johnson, won't you come forward and join the Lord's army?" He got up and said, "I want you to



H. M. BUTTS, PRESIDENT.

understand that I joined the Lord's army in the Baptist church last week." He replied, "No, that is not the Lord's army; that is the Lord's navy." (Laughter.)

I feel in railroading that it makes no odds whether you are in the operating department, the painting or the car department. We are all under one head, working for one thing only—that is, the good of the service. I am just as much a car painter as a car builder, because painting comes directly in my department, but I am very fortunate in the position that I hold, having a man under me who forgot in a few minutes more about painting than I ever knew. Last year I said something to the young man. I advised him, and repeated it over and over again, as to the future—the prospect there is for a young man in railroading. It is true, in looking up the list of painters, that there are a few painters that have risen out of their own craft, yet it is in their own hands. We are fortunate, when we have trouble on our system, in having a man who will go and settle the differences better than some of us who are paid higher prices than he is—a man who is respected from one end of the road to the other. That man is Mr. H. M. Butts, your worthy Vice-President. I say this without a spirit of flattery to Mr. Butts, because he is beloved by us all. He knows his business and attends to it.

Now you painters sometimes think you are overlooked, that you do not amount to anything, that the last fellow who gets the car is the painter, who gets the devil for it all. That is very near true and there are painters in this hall who have known me for a great many years, and who have been associated with me, who have gotten me out of some pretty narrow escapes in not getting the equipment out on time. When I first came East I met a prominent master car builder. You know the Eastern people think as a class that they are a little bit better than other folks—narrow-minded. I can appreciate that, for I was born there myself, and know what I am talking about. He said he thought their shop was the best adapted for getting out work, and the best place you ever saw. He used to paint and varnish cars out doors. The trucks were not taken out from under the cars, and I never saw equipment in such shape as that. He since has been changed, and has been West, and came back, and he said, "I did not know anything. I found out." Now, you have got to get away from home. That is where the blessings and results of this convention come in. I want to say to you, Mr. Chairman, and to all of you, that this convention won't amount to a thing if you come here and discuss things and don't put them into effect. As I said last year, do not let Brother Gohen and some others do all the talking. There are just as bright gentlemen here among the young men as the old, and if you come here to get any good, go home and put it into effect. Then you will benefit us in charge of the rolling stock. But if you come here and sit and hear somebody talk, and say, "My idea is better than his," then you are too narrow, and the convention does you no good. Remember that this is an educational body, and not a legislative one. The Masters are the legislative body; we make laws and rules and you carry them out. You come here to discuss things, and, as I said, perhaps you some times think your idea is

better than Mr. Butts', and some others, whose names I cannot recollect, yet it does you no good unless you come and try to learn. When I first came in and saw the crowd here, it reminded me of a story I heard of a minister, who had somebody call at his house. He had a room full of company, and the visitor said, "You have'nt enough chairs for all?" "No," he said, "I have got too much company for the chairs." That is about the way with you here. You are a little bit overcrowded. I had expected to meet Mr. Parish, of the Lake Shore, and we had arranged that the both of us were going to come on and say something encouraging to you. Mr. Parish is one of the brightest young men who have come along in the Lake Shore Car Department, and he takes an interest in this work. I was thinking, while riding here, what I might say to the painters. A great many thoughts came through my head, and this was one:

Then let our conventions be held each year;
 Brings subjects and discuss them without fear.
 May everyone that attends from the North South, East
 or West,
 Say that this convention is the best.

It will do you no good, as I said in the first place, unless you come and learn. The officers are not letting you away and paying expenses and time unless they expect they are going to get results. We do. We have a free willingness on our part for all our men to come and attend these conventions. We find we get double returns.

I sat on a table back there a few moments ago with a very sensible man, who after a time listening to the speaker who spoke right to the point, he said, "That's good." Now that the Mayor and the minister have gone, I want to say, with regard to the Mayor, who has risen from the ranks, he is a man amongst men. He thinks it is no disgrace to speak to a common motorman or a conductor. That is the successful man of to-day. Some of our foremen get a little lifted up; they think they are a little bit better than anyone else. I never consider him better than the lowest man connected with me. Mr. Bailey was the first man I met this morning, and you would have thought we were like father and son when we meet. That is the kind of people you want. Those are the men who get results. The man who has the right magnitude in him gets the best results.

I wondered how the ladies would come in, but I don't know of any subject that the ladies are more interested in than painting. (Laughter.) There are some who can paint themselves most lifelike. (Laughter.)

I hardly know what else to say. I want you to feel after the convention is over, that you have enjoyed it, and that it has been beneficial. Above all, do not think Mr. Butts does not agree with you, or that I or this man are not correct.

I want to thank you, Mr. President, and when you are in New York at any time, come and see me; our doors are open, and our painter is just as good as any other man in the department. (Applause.)

PRESIDENT LANFERSIEK: The ladies are now at liberty to retire. The next order of business is the Report of the Secretary and Treasurer. I want to say to the members that on account of ill-health the Secretary is not able to attend this meeting. His physical condition is such that it is almost impossible—of course, it is impossible to say how long he will live, probably a month, probably not more than a day or two. I have therefore appointed Mr. A. P. Dane and Mr. Charles A. Cook as Assistant Secretaries, who will take charge of the business. You will listen to the report of the Secretary.

REPORT OF SECRETARY-TREASURER.

Mr. President and Members:

I present you today with the annual report, noting for your information the transactions of the Association for the year ending August 31, 1905. The meeting last year was well attended considering the inability of many members to get free transportation to Atlantic City. The interest shown by the majority of members present, in the discussions and transaction of business during the sessions gave evidence that they were working for the advancement of the objects for which we are associated. The proceedings of the thirty-fifth annual convention were published and mailed to all members.

One hundred and thirty-three copies of the Railway Master Mechanic were subscribed for and sent to all active members in good standing.

The Advisory Committee met in New York City, February 25th, and prepared the programme for this convention, which was published in our official journal.

The annual circular notice was issued August 1st and mailed to seven hundred foremen car and locomotive painters, inviting them to meet with us at this convention.

Each year all members over two years in arrears for dues are given an opportunity to pay up at the convention, and if they fail to do so their names are dropped before the list of members is published in our annual report.

Last year nineteen members were dropped for non-payment of dues, and four by request.

It is our sad duty to announce the death of J. P. Waggoner, Henry Laidler and G. H. Rattenbury. There may be others, but these are the only ones that have been brought to our notice.

Sixteen active and two associate members were enrolled during the year, giving us a membership September 1st of 195 active, 24 associate and 13 honorary members. Total, 232.

The financial condition of the Association is good, our receipts this year were not so large as last year, but our expenses were lower, so the balance in the treasury has increased.

RECEIPTS FOR THE YEAR.

Membership fees	\$ 68.00
Annual dues.....	580.50
Cash on hand September 1, 1904.....	115.60
Total	\$764.10

1904. DISBURSEMENTS FOR THE YEAR.

September 13—Express on banner.....	\$ 2.00
September 13—J. H. Pitard, express on Test samples...	2.60
September 25—J. H. Lighty, stenographer.....	60.00
October 14—W. S. Kent, paper and envelopes.....	4.00
November 1—One hundred and thirty-three subscrip- tions to Railway Master Mechanic.....	66.50
November 11—Two hundred and fifty clasp envelopes	3.00
December 12—Printing annual report.....	178.15
December 17—Express on reports.....	5.25
1905.	
June 30—Expenses of advisory committee.....	16.50
July 3—Paper and envelopes.....	2.25
July 3—Printing 1,000 circulars.....	8.00
Postage for the year.....	41.50
Secretary-Treasurers' salary.....	200.00

Total\$589.75

Leaving a balance in the treasury September 1, 1905, of
\$174.35. ROBERT M'KEON, Secy'y-Treas.

PRESIDENT LANFERSIEK: Gentlemen, you have heard the report. What is your pleasure?

The report was, on motion, accepted.

PRESIDENT LANFERSIEK: The next business will be the report of the Committee on Tests.

The Committee not yet being ready to report, the convention proceeded to the nomination and election of officers. President Lanfersiek appointed as Tellers, Messrs. D. A. Little and James A. Gohen.

ELECTION OF OFFICERS.

MR. BUTTS: Gentlemen, I rise to my feet to nominate a man for President for the coming year whom you all know. No words of mine could add anything to your knowledge of his ability to serve you for another year. I would have the pleasure of nominating Mr. John F. Lanfersiek, our present President, for another year. (Applause.)

MR. GOHEN: With all due respect to Mr. Butts' sentiment, and with my kindly feeling for our President, I certainly say No. This association must distribute its honors. There are just as many of our members of this association that are capable of filling this chair just as well as President Lanfersiek. I will not say any better, but just as good and it is and act of injustice to the other members who want recognition, and should have it, whether they seek it or not, to reelect the President of this Association. I had the honor of being President at one time of this Association, and was solicited very strongly to accept a second term. I positively refused to accept it, because I thought that one term as President of this Association was enough honor for any man who belonged to it. With all due respect to Mr. Lanfersiek, I do not wish to see him re-elected. On the contrary, I nominate Mr. H. M. Butts as President for the next year of this Association.

PRESIDENT LANFERSIEK: I want to say to you that I heartily endorse every word that Mr. Gohen has said. While I thank you very highly for electing me President last year, I do not wish to serve another year. I would therefore prefer to have our First Vice-President elected.

The nomination for President was closed, and Mr. Bishop moved that the Secretary cast the ballot of the convention for Mr. H. M. Butts for President.

The motion was agreed to, and Mr. Butts was declared duly elected.

MR. BUTTS: Mr. President, Gentlemen, and members of this Association: I will not take up your time any more than to say that I heartily thank you for the honor that you have conferred upon me. I certainly consider it the greatest honor that has ever been conferred upon me in my life to serve you as President. I came up from the ranks among the painters; they are all my friends. I have their interests at heart, and shall try the best I can during the coming year to serve you one and all alike. (Applause.)

PRESIDENT LANFERSIEK: The next nomination is for First Vice-President.

Mr. Stroud nominated Mr. J. H. Kahler for First Vice-President.

There being no opposition, it was moved and seconded that the Secretary cast the vote of the convention for Mr. Kahler, who was thereupon declared duly elected.

PRESIDENT LANFERSIEK: Next in order is Second Vice-President.

Mr. Paulus nominated Mr. B. E. Miller.

Mr. Quest nominated Mr. J. W. Houser.

MR. LITTLE: I second the nomination of Mr. Houser. In 1888 Mr. Houser was made a member of this Association in this room, I believe—or in this house—and he is an old and faithful member, older than a great many of us here. He was here a great many years before I was, and before a great many others. He has been nominated year after year as a candidate, but others have been elected newer than him. I think it is time for us to tender the honor to brother John Houser.

The nominations for Second Vice-President were closed, and the delegates proceeded to vote, the tellers reporting the result as follows:

Mr. Miller	32
Mr. Houser	59

91

PRESIDENT LANFERSIEK: Mr. Houser having received a majority of the votes cast, I declare him duly elected as Second Vice-President during the ensuing year.

MR. HOUSER: Mr. President and gentlemen, I want to thank you, and I promise to fulfill my position the best I can in my humble way.

PRESIDENT LANFERSIEK: The next will be the election of a Secretary and Treasurer. I want to say to the members of this Association that it has been understood for a number

of years that as long as Robert McKeon lived he would be our Secretary, and I hope that idea will be carried into effect. Nominations for Secretary and Treasurer are now in order.

MR. STOUT: I move that Robert McKeon be nominated for Secretary and Treasurer.

MR. BAILEY. Before that vote is taken I want to say one word. I am up here for the purpose of nominating a new man. I do not understand that Mr. McKeon is an active member of this Association, and I do not see how he can hold any office. He is certainly physically incapacitated from filling it. He has been an honor to the Association, and I think we have honored him all that we really ought to, and I am in favor of electing a man who can fill the place, and that man is Mr. A. P. Dane, the man who has acted as Secretary at two or three conventions, and I do not remember that he has ever even been thanked for it. I hope he will be elected. I have nothing against Mr. McKeon, only I think we have honored him all that we ought to consistently, and I think it is due to us and to him that we have a new man.

Mr. Quest nominated Mr. Charles A. Cook.

MR. GOHEN: I always like to defer to the wishes of the Nestor of the association, and while we have honored Robert McKeon, I think if it were not for the active and earnest efforts of Robert McKeon there would not be any Master Car & Locomotive Painters' Association. When this Association was in the death throes, that man held it up, as you all know, and I tell you that so long as that man lives no other man will get my vote for Secretary. He may be dead now, for all we know, and word came to us last night that he was about to die. We can elect Mr. Dane or Mr. Cook or any other man, whether or not a member of this association, as an assistant to Robert McKeon, but so long as he lives let him hold the name of Secretary of this Association. In answer to Mr. Bailey's remark about his not being a member in the association, I do not think you will find anything in our Constitution and By-Laws that debars us from electing anybody we want as Secretary of this Association. I believe the Master Car Builders' and the Master Mechanics' Secretary is not an active car builder. Am I right, Mr. Brazier?

MR. BRAZIER: That is right.

MR. GOHEN: He is not a member of those associations, and it does not matter whether or not the Secretary is a member of this Association. He was a member; it is not his fault that he is not a member to-day, and that cannot be said of some others who might have been members of this Association, but are not. So I say, boys, let us hold Bob just as long as he lives. You never had any other one. Let us not have any other one as long as he lives. (Applause.)

Nominations were closed, a vote taken, with the following result:

Mr. McKeon	91
Mr. Dane	11
Mr. Cook	3
Total	<hr/> 105

PRESIDENT LANFERSIEK: Robert McKeon having re-

ceived the majority of all the votes cast, I declare him elected as Secretary and Treasurer of this Association for the ensuing year.

MR. STOUT: I move you that the gentleman who has been the mainstay, I might say, of this Association since its existence—I think it would be no more than appropriate that we should declare he was unanimously elected Secretary of this Association.

The motion was seconded and carried.

MR. GOHEN: There is no proviso in our Constitution for the election of an Assistant Secretary, but under the head of "New Business," before this convention adjourns, I wish to introduce an amendment to our Constitution, providing for the election of an Assistant Secretary and Treasurer, and I hope that you will all vote for its adoption. That shall have to be done in writing under the head of "New Business." Then we can at that time elect an Assistant Secretary and Treasurer.

MR. BAILEY: Let us not go to that trouble. It takes a whole year to do that. Let us fix it up right here. We can by unanimous consent elect a man to that office.

MR. GOHEN: If that is agreeable to the Association that would be still better. Mr. President, I move that the rules be suspended, and that we proceed to the election of an Assistant Secretary and Treasurer with the right of succession.

The motion was seconded and carried.

Mr. Stroud nominated Mr. A. P. Dane.

Mr. Wynn nominated Mr. Charles A. Cook.

The nominations were closed, and the convention proceeded to vote, with the following result:

Mr. Dane	51
Mr. Cook	37
Total	88

PRESIDENT LANFERSIEK: Mr. Dane having received the majority of all the votes cast I declare him duly elected as Assistant Secretary and Treasurer.

MR. COOK: Allow me to thank the Association for the very hearty support they have given me in this friendly contest between my twin brother and myself. While it would have been a great honor you to serve in that capacity, it may be that when Mr. Dane gets old I can be his assistant. (Laughter.) I move the election of Mr. Dane as Assistant Secretary and Treasurer be made unanimous.

The motion was seconded and carried.

MR. DANE: I thank you very much for the honor you have conferred upon me, and I will endeavor to perform the duties to the best of my ability.

PRESIDENT LANFERSIEK: I think it would be well to take into consideration, as long as we are in that line, the matter of compensation for the Assistant Secretary. I think this association can afford to be generous at this time, at least. What is your pleasure?

MR. LITTLE: I presume that Mr. McKeon will do the greater part of the work at his home, or his daughter, who has been doing it for years, and I suppose the Assistant Sec-

retary will only have light duties after this convention is over. His main work will be at the convention here, but all the work during the year, such as sending out notices, will still come from Mr. McKeon.

MR. GOHEN: I don't think you will ever get another notice from Mr. McKeon. For all we know, Bob McKeon might be dead now. I got word last night that they were looking for him to die. He may be alive now, but certainly will not live over sixty days. He will never do any active work for this Association, and upon his death succession follows. The man today elected as Assistant Secretary and Treasurer of this Association succeeds Mr. McKeon to all the emoluments of the office. That is the way I look upon it, and I think I am right. I do not think I am wrong in it at all.

MR. LITTLE: We can arrange that whatever the Assistant Secretary will do we can compensate him for at the next convention or at the end of this convention.

MR. BUTTS: I concur in nearly everything that the two brothers have said, but I look at it this way: I think the work should be done, under the circumstances, by the Assistant Secretary. It is going to mix matters up considerable to have the work done by Mr. McKeon or his family, and from the prospects it is going to be more or less of a burden for them to do it. I want to be very much in favor of having the Assistant Secretary do the work, and relieve them from any further responsibility. I think we can afford to be generous enough to pay the Assistant Secretary the same salary we have been paying the Secretary—for one year, at least, and I should be in favor of that. He has practically got to assume the duties of Secretary and do the work; he has been doing it without compensation for one or two conventions. We can afford to be generous enough to pay him, I think.

MR. STOUT: Why not leave this matter to the officers and let them settle it?

MR. GOHEN: The Assistant Secretary, of course, takes hold now. What he has done is like what any of the rest of us would have done—just as an accommodation to Robert. The duties of the Assistant Secretary begin now. He will not have earned his salary until the year is up. Why not let the question of salary go until next year; then we can do what is right, and we will do the right thing.

PRESIDENT LANFERSIEK: That matter will be deferred, then, until the next convention.

MR. RODABAUGH: We are not any different from any other organization that has officers, and if an officer dies during his term there is not anything said about salary. I do not see why we should not give it to Secretary McKeon's daughter. She has been doing the work, and if he drops off I think she ought to have the perquisites for one year. I do not think there should be any question about that at all.

PRESIDENT LANFERSIEK: That is a matter I thought of when I brought the subject up. I think it would be right, if he should die to-day—he is elected Secretary and Treasurer, and should be paid a salary as though he did the work. At the end of the year we can fix the salary for the Assistant Secretary. So, therefore, we will let that matter drop until the proper time.

MR. GOHEN: We will be just as liberal with the new Secretary as we have been with the old one.

The convention at this point, on motion of Mr. Gohen, adjourned until Wednesday, September 13th, 1905, at 9:30 o'clock a. m.

SECOND DAY.

Wednesday, September 13, 1905.

The convention was called to order by President Lanfersick at 9 a. m.

PRESIDENT LANFERSIEK: Mr. Walbank, one of the committee of the supply men, desires to know whether the members of this convention would like to take a sail on the lake this afternoon. He says on account of the roughness of the weather, he does not feel it would be the proper thing to engage a boat unless the members of the convention are satisfied to go, and he desires an expression from the members whether they wish to go or not. I would be pleased to hear from any of the members.

MR. B. E. MILLER: I think for the benefit of those who have never sailed on the lakes, like some of us have, I would suggest that the matter be deferred, at least until the weather is a little more propitious. I feel sure that in going out in this gale to-day a great many of the members, their wives and daughters would get deathly sick, and regret having attempted the trip.

MR. SAMUEL BROWN: I second the suggestion for the simple reason that I have had some little water mixed in with my time of life, and it is one of the most unpleasant things in the world to be sea sick. You will forget you ever owned a cent, or ever had a friend in the world if you get sea sick (Laughter), and if it is reasonable, I would suggest that Mr. Miller's remarks were very good—to defer it.

MR. BURTON: I hope this matter will not be dropped, because, while I do not want to be sea sick, I want to have the pleasure of sailing on the lake before I leave Cleveland. I would not mind being a little sea sick, but would not want to be in the condition the brother mentioned; in fact, I regard myself up to the present time with a view to remaining in good health. If I got sea sick, there would be "something doing," sure. I want to go sailing on the lake.

MR. BUTTS: As I understand it, the committee would like to have some assurance that there would be a good attendance. They have got to engage the boat in advance, and go to considerable expense, and I think it would be a fair expression of the delegates here if we would take a rising vote of those in the room, to see how many there are who would say they would go on the excursion, whether it is rough or not, and I would move you that we take a rising vote of those present.

MR. COPP: Could it not be postponed until to-morrow afternoon?

MR. BUTTS: Or until some time when the weather would be fair, when we would not get sea sick. I doubt very much whether there would be a great number go to-day.

MR. COPP: I think it had better be deferred until tomorrow.

MR. MILLER: I understood that we were going to go sailing in small sail boats, which is of an entirely different character and nature. Mr. Walbank informs me that we are to take some of those large side-wheelers plying between Detroit and here. I do not believe there is enough wind to make anybody seasick in a large craft of that description. I do not see but what we could undertake that sail on the lake to-day as well as any other time. It is also a fact that the wind always settles down towards the afternoon. I believe it would be all right to go. I thought we were going to undertake it in the small open yawls.

MR. BISHOP: I find a great many ladies object to going unless the lake is smooth.

MR. MILLER: I move we undertake the trip this afternoon. I will guarantee you there won't be a dozen that will get sick. The motion was seconded and carried.

PRESIDENT LANFERSIEK: Before we proceed to any further business I would like to read this communication from Mr. H. F. Ball, Superintendent Motive Power of the Lake Shore & Michigan Southern Railway:

"Cleveland, Ohio, September 13, 1905.

"To the Chairman and Members of the Master Car & Locomotive Painters' Association: Gentlemen: If any members of your Association, or immediate members of your family, who are with you, wish to take advantage of the opportunity to visit Niagara Falls during your stay in this city, the Lake Shore & Michigan Southern Railway will be glad to furnish transportation to Buffalo and return. Application should be made direct to Mr. Robert Shore, who will make the necessary arrangements."

PRESIDENT LANFERSIEK: I desire to say that Mr. Shore told me that if any of the members desire to take advantage of the invitation, to come to him direct, giving the names of all the persons in their parties that desire to go.

MR. MILLER: For fear some of the members may not know who Mr. Shore is, I would suggest that he be pointed out.

PRESIDENT LANFERSIEK: I have the pleasure of introducing to you Mr. Robert Shore, of the Lake Shore & Michigan Southern Railway.

MR. LITTLE: I move you that we give a rising vote of thanks to Robert Shore and the officials of the Lake Shore road for their kind invitation, and that it be accepted.

The motion was seconded and carried.

MR. SHORE: I would like to get a report of how many are going by to-morrow noon, so that we can make the arrangements and get the cars. They will put on two or three coaches, or whatever is necessary. They can go on Friday at 3 o'clock, get a night's sleep, and see the Falls the next morning. I would like to know how many are going. I know at the conventions I have attended they usually adjourned at Friday noon.

MR. MILLER: In order to give the matter as much publicity as possible, I would suggest that the Committee on Arrangements be instructed to post a notice in the lobby of the

hotel, immediately, so that all the members and visitors may be informed upon the subject as to the proper mode of making application to take in the trip.

PRESIDENT LANFERSIEK: I would suggest that Mr. Shore, with two other members of the convention, go down and meet them and ask them to post that notice, in order that all may be notified. Mr. Miller and Mr. Stroud will go with Mr. Shore and get matters arranged satisfactorily to the members of the convention.

I would say to you that we have with us this morning Mr. Sam Brown, who was unable to be here yesterday. I know we would like to talk to you this morning.

MR. BROWN: I thank the president very much for the beautiful introduction he has given me. My principal purpose, gentlemen, is to comply with the promise I made last year. I am sorry that I could not be here yesterday morning, but I was too far away and the cars did not move fast enough for me. There were various things that bothered me. I have been bothered all through life. I was afraid I might be bothered in finding a few remarks to make, so one of our clerks kindly volunteered to put something on paper, and, if I am able to read it, I will give it to you in that form.

To the Officers and Members of the Master Car and Locomotive Painters' Association.

Brothers:

It affords me great pleasure, I assure you, in being permitted to comply with the promise I made at our last convention in regard to presenting the Association with a gavel made out of a piece of wood taken from the U. S. Flagship Olympia, which made such a memorable record for the United States on May, 1st, 1898, at Manila Bay.

After the battle of Manila Bay the Olympia came to Boston and received extensive repairs, and the piece of wood was given me by an officer of the Charlestown navy yard.

In behalf of one who has always taken a deep interest in the success of the M. C. & L. P. A., I respectfully present it to you; not for its intrinsic value, but more for its historical connection with the country we should honor and uphold.

Having served in the United States navy in 1862 and 1863, I hope you will pardon me for taking a little pride in the history of the navy, and having been associated with the M. C. & L. P. A. practically since its inception, at which time I was working under the direction of Mr. James Platt, who was foreman painter for the Old Colonial Railroad Company at South Boston, Mass., I also take great pride and interest in its welfare.

With my best wishes for the success and perpetuity of the Association, I am,

Yours fraternally,
SAMUEL BROWN.

PRESIDENT LANFERSIEK: I will ask our First Vice-President to respond to Mr. Brown.

MR. BUTTS: Mr. President and members of the convention: I know that I will voice your sentiments when I say I certainly heartily thank plain Sam Brown for his thoughtfulness and efforts in our behalf in furnishing us with a beautiful gavel of this kind. It certainly is ornamental, and I hope will be useful for many years to come. You know

there is no member of this Association who has at every session contributed more to our pleasure and interest than our worthy member here Mr. Brown. He is always ready to entertain us, both at the opening and close of the sessions, and we honor him for it. I will thank him on behalf of the members of this association for this beautiful gavel. I want to move you a vote of thanks be extended to Mr. Brown for this gavel.

The motion was seconded and carried.

MR. BROWN: Mr. President and gentlemen, the thought occurred to me that some party of an inquisitive turn of mind might like to know what kind of material was on that gavel. The material that is on that gavel is of a new departure. We have had so many names for the old fashioned goods, and I was at a loss to give the material a name that is on that gavel until looking over the September number of the Railway Master Mechanic Mr. Warner Bailey came to my relief. If any of you have seen that number you will see the different names he gives of the various kinds of material there, and they are all spelled most peculiar, but they are pronounced all the same. Now the material on that gavel is spelled this way, "S-h-e-r-l-a-q-u-e-i-r-o-u-i-n-e," but, gentlemen, it is pronounced "shellac." (Laughter.)

PRESIDENT LANFERSIEK: I desire to call attention to the fact that this convention was called at 9:30, as agreed upon yesterday by the vote of this association. I will say, further, that the convention will be opened at the appointed time, regardless of the fact whether there are many members present or not. If there is a quorum present, we will open.

The first business of the meeting will be the reading of papers. The first subject is "The Renovation of Coach Window Shades, Particularly Those Most Generally Used, Such as 'Pantasote,' etc., With a View to Increasing Their Life." The first paper on this subject is by Mr. R. J. Kelley, of the Long Island R. R., Brooklyn, N. Y. Mr. Cook will please read that paper.

Mr. Cook here read the paper as follows:

MR. KELLEY'S PAPER.

MEMBERS OF THE M. C. & L. P. ASSOCIATION—SUBJECT NUMBER ONE.

The Renovation of Coach Window Shades, Leather and Imitation Leathers.

The writer takes up this subject with delicacy, owing to its newness, it never having been discussed before this Association at any previous meeting. This subject, no doubt, was selected by your conference committee, on account of the great number of cars equipped with leather and leather effects.

In the past few years woven fabrics for car curtains have been displaced to a certain extent by the imitation leathers, principally on account of the difference in cost. The woven fabrics, either cotton or wool, were handled strictly by the upholstering department, and were cleaned with soap and water, or benzine, as the case required. At each shopping, when beyond cleaning, the remedy was to re-dye. The latter process

is not only costly, but has a tendency to destroy the web of curtain cloths. Increased cost of maintenance of the woven goods cloth brought substitutes by the score; two or three of the leather effects are principally used and give good satisfaction when they are looked after and maintained the same as other car furnishings. If allowed to go too long without attention they take on a whitish effect, caused principally by moisture and helped along to a certain extent by sulphur fumes from the locomotive. The latter affects the coloring of curtain backs. This we have demonstrated by hanging samples of leather effects in the ventilators of the engine house.

With a good many leather substitutes we find on the colored side of curtain a substance of the nature of shellack; in the case of trolley cars equipped with this material we have found white marks. This is caused by curtains being pulled down and exposed to rain and then wound up and allowed to dry. The same thing applies to regular stearn equipment, windows are up in the summer time and curtains down, operating at the will of the traveling public. This condition we cannot deal with. Ours is to inspect and renovate. In different parts of this country there are various deposits of as many different natures, principally sulphur and alkali that adhere to car curtains. We have found that that old reliable cleaner, soap and water, will, in most cases, with the addition of a little agitation with a bristle scrub brush, remove this deposit from curtain backs. After drying apply with a piece of sponge or cotton waste a very little of any of the well-known varnish renovators in use. In cases where curtains have been allowed to go too long and after removing dirt deposit with soap and water you find the color has gone the only remedy is to apply more color, shade to suit the original. This to be applied as a very thin glaze. We have found a good finish in varnish thinned with turpentine to be satisfactory. Of course, with sufficient coloring to match original shade. For the information of those who have not had experience in handling leather effects, would state we have personally experimented with mixtures of shellack, lacquer, boiled oil, raw oil, rubbing varnish and colors mixed with Japan oil dryers. We find the outside car finishing, cut with turpentine and a little coloring added, will give best results. Like a great many remedies, if taken in time, it will not be found necessary to paint curtains very often. Where roads practicing terminal cleaning they should instruct their men in charge to wipe outside of curtains regularly, while a little car cleaner will be found a remedy to prevent the white marks, caused by moisture showing when cars are in service. Cleaning of the cloths of interior side of curtain is usually done with benzine or any of the powdered soaps; the benzine brushed over is more commonly used than soap. With the latter we have found the color to run and stain balance of pattern, especially with the blues and greens.

We would like to hear the experience of those who have been for a long time practicing terminal cleaning or shop handling of leather curtain material and its imitations. We think this will be of great interest to superiors who are much interested in this subject.

R. J. KELLY,

Gen'l Foreman Car Dept., Long Island R. R.

PRESIDENT LANFERSIEK: The next paper is by Mr. H. W. Forbes, of the Erie R. R., N. Patterson, N. J.

The Secretary read Mr. Forbes' paper, as follows:

MR. FORBES' PAPER.

Master Car and Locomotive Painters' Association of United States and Canada.

Gentlemen:

Subject No. 1, "The Renovation of Coach Window Shades"—particularly those most generally used, such as "Pantasote," etc., with a view to increasing their life, would naturally appear to be in the upholsterers' line, but there are several members of this Association whose duty it is to take care of the window shades. The keeping of car curtains clean is a very important matter to all railroads. This difficulty can be in a measure overcome where "Pantasote" curtain material is used by the following method:

Instructions should be issued to the cleaning department at terminals, when cleaning a car that all curtains should be pulled down and any accumulation of dust that has collected on the inside of the curtain, removed with a brush or air jet. The outside or "Pantasote" side can be cleaned at the same time they clean your windows, by going over the glazed, or "Pantasote" side, with a wet sponge or cloth.

This will remove all stains and accumulation of dirt. Where "Pantasote" curtains have been allowed to run without care for a few months they can be cleaned and restored to their original condition by removing them and stretching them upon a table that has tight joints between the boards (open joints will mark the curtain) and taking a close grained sponge or a brush and give them a thorough rubbing with a good soap solution on both sides—the amount of rubbing will depend upon how much dirt shows up in the lather. Then wash off with clean water. The "Pantasote," or leather, side of curtain when the lustre wears off should be coated with an elastic coating adapted for leather dressing. The curtains made entirely of cloth should be thoroughly brushed or blown out with compressed air at the terminals, and when cars are shopped, if the curtains are in good condition, a thorough washing with an ammonia and soap solution will restore them to good condition.

When the curtains have reached the stage where washing will not restore their color both the "Pantasote" and cloth curtains should be dyed, which may be done in the following manner:

First, wash the curtains with a solution of ammonia and water or ordinary soap and water and if the curtains are so dark that the dye will not color them properly, remove the old dye from them by placing them in a cold bath of chlorine, agitate them occasionally until the dye is entirely or sufficiently removed, then rinse in cold water and they are ready for re-dyeing.

The color is optional, you can use any shade desired, but in case you wish to make them a nice shade of dark brown you can charge a color dye bath with 5 ounces of "Diamine Brown" and 2 pounds of ordinary table salt for every ten gallons of cold water. Immerse the curtains and work them for about three-quarters of an hour. Then dry them at a

low temperature, not exceeding 110 degrees. The best method of handling these curtains I have found is to have a wooden vat made large enough to allow the curtain to hang full length into it and have an air line run into the vat with two branch pipes that have been drilled full of holes, fastened to the bottom of the vat, then when the curtains are placed in the dyeing solution all that is necessary to do is to turn on a little air pressure which will keep the solution in motion and thoroughly mixed during the time necessary for the dyeing process.

Respectfully submitted,

H. W. FORBES.

Scranton, Pa., September 1, 1905.

PRESIDENT LANFERSIEK: The last paper is by Mr. W. H. Estabrook, of the D. L. & W. R. R., Scranton, Pa.

The paper was read by the Secretary, as follows:

MR. ESTABROOK'S PAPER.

To the Officers and Members of the Master Car and Locomotive Painters' Association, Cleveland, Ohio:

The subject, "The Renovation of Coach Window Shades," particularly those most generally used, such as "Pantasote," etc., with a view to increasing their life, has been assigned to me for discussion.

In renovating Pantasote curtains my practice has been to thoroughly dust or blow them. I then take a weak solution of oil soap and water, lay them flat on a table and scrub thoroughly with a car scrub brush, rinse, clean and hang up to dry. After they have been dried I oil off the leather or Pantasote side with a solution of one-half raw linseed oil and one-half benzine and then wipe them dry. In this way I have had very good results.

I have also done some experimenting in dyeing Pantasote curtains, but up to the present have not had very good results inasmuch as after dyeing them I find the sun's rays has a very damaging effect, causing them to fade very fast. This gives them a most unsightly appearance and in my opinion is deleterious to the life of the curtain.

Respectfully submitted,

W. H. ESTABROOK,

Foreman Car Painter, D. L. & W. R. R.

PRESIDENT LANFERSIEK: Gentlemen, the subject is now ready for discussion.

MR. B. E. MILLER: Mr. Chairman, this is quite an important subject, and I think it ought to be discussed a little bit. A great many of the railroads are after information on this subject and they are after it in a vigorous manner. I have done a great deal of experimenting myself along the line of taking care of "Pantasote" curtains. I have experienced no trouble whatever in taking care of the glazed side, or weather side of the curtain—the imitation leather, as it were—but when it comes to taking care of the cloth side, that is different. The cloth side of nearly all of the "Pantasote" curtains is composed of cotton goods, and cotton goods are quite a difficult problem to handle when it comes to dyeing them. It is different from dyeing woolen goods, and as you have noticed in Mr. Estabrook's paper, he states they

fade very readily, which is a fact. We have had that experience when we resorted to re-dyeing curtains. You can get them to look very fair for a little while, but there is no permanency to the die. Another objection to re-dyeing them is the fact that you cannot get an even color over the entire curtain. The parts that are faded won't die up as dark as the parts that have not been exposed to the weather, or the sun's rays, and as a consequence are not faded as much as the exposed parts. Another problem is getting rid of the gilt decorations on the cloth side before you can successfully re-dye them. The exposed parts will be found without the gilt ornamentation, while the unexposed parts will have the gilt ornamentation intact, and before re-dyeing can be resorted to these gilt ornamentations—usually a little gilt star which you are all familiar with—have to be removed, and it requires some pretty vigorous stuff to remove that gilt decoration, which you will often see is necessary before successful re-dyeing is possible. For this purpose we have tried ammonia, potash and the likes of that, and they result more or less in injuring the fabric and loosening the material from the adjacent part of the curtain. So it is quite a problem, and I would like to hear in full from any of the members who have had any experience in taking care of these curtains.

PRESIDENT LANFERSIEK: Has any other member anything to offer in this matter?

MR. HUTCHINSON: I have had a little experience in trying to meet the difficulty Mr. Miller has mentioned, and I find in taking care of the inside of the curtain very often the trouble that he is up against, so to speak, is caused by the curtain being worn off on the outside from continual handling. The surface having worn away it absorbs the material applied on the outside, and that prevents us being able to make a satisfactory appearance on the inside of the curtain or to get results satisfactory on the inside of the curtain. I think we have had in several instances to turn the curtain. This is in our shop a matter we leave to the upholsterer, but of course in finishing the outside of the curtain it comes under the head of the paint department. There are a great many varnishes or solutions used. We have one, which I cannot call to memory now, but it just seems to me that anything we put on the outside of the curtain will, in a short time, overload the curtain, and the usual result, of course, from overloading with varnish or anything of that kind is a damage that we cannot overcome by finishing these curtains in that way. I do not know but I have concluded that it is not wise to apply anything in the line of a hard-drying varnish, for the reason that it dries on bone-hard in time and cracks, and it seems to me that some carriage solution, like carriage-top dressing, flexible—supposed to be flexible coating—is the material we ought to apply to the outside of these curtains, something in the nature of a wax, that will not dry hard, and it seems to be an impervious protection to the curtain.

MR. HOUSER: Our experience has been that the curtain becomes stained, dark—very dark, and we have trouble in that respect; in fact, I sent some to the woolen mill in our town to see if they could renovate them, but they could not do anything with them successfully. We cleaned them up in the



J. H. KAHLER, FIRST VICE-PRESIDENT.

shop with a solution of soap about as good as they did in the woolen mill. We never tried dyeing them, for they were stained so very dark, we would have to make the curtain so dark to overcome the stain. We practically have given up the cotton curtain, and are using "Pantasote." As yet we have not done any renovating of the "Pantasote" curtain. I would like to know if anyone can tell me how we can get rid of that stain on the cotton curtain?

MR. FORBES: We dip the curtains in a solution of chlorine, which removes all the dye and renders the curtain ready for re-dyeing. We have had no trouble in removing the stains or dark color from the curtains. In dyeing, if you want to dye them brown, add "Diamine Brown," in the proportion of five ounces to every ten gallons of water, and two pounds of salt, and that solution will dye the curtains. You can select any color that you desire.

MR. HUTCHINSON: Is that satisfactory in curtains that have been used for several seasons? Have you no difficulty with what has been applied on the outside of the curtain?

MR. FORBES: I was talking about the cloth curtains, but "Pantasote" when that gets so bad it commences to decay, we do not try to renovate it. We have no trouble in removing the stars with ammonia, and taking all that gilt ornamentation off.

MR. MILLER: Along the bottom will be found a streak varying from six to twelve or fifteen inches, where it has turned lighter. It has been exposed, and all the gilt stars and ornamentations have worn off. That streak right through the bottom of the curtain will be found much lighter than the rest of the curtain. I am talking about the cloth finished cotton goods side. When cleaning those up with ammonia or chloride solution, what do you obtain? Are you able to eliminate the difference in color so that when the curtains are re-dyed the whole cloth side of the curtain assumes a uniform color? That is something we have not been able to overcome with a good deal of experimenting ourselves. Another thing, we find that this cotton side, if you are successful in getting a fairly good color by dyeing, just a few days' exposure to the sun will almost be sufficient to take it all out again, and it will look worse than before. I really believe that when curtains reach that stage, we will have to throw them into the scrap heap, and get new ones.

MR. FORBES: We use ordinary table salt. We have it in barrels, and it is very handy, but where we find a light streak we use chlorine, but you have to be careful or you will blister the outside of the "Pantasote." But the gilt ornaments, we remove them with ammonia. Several curtains we had were very bad, and the upholsterer reversed the curtains.

MR. MILLER: I would like to hear from Mr. Glass. He has had considerable experimenting in that line.

MR. GLASS: Mr. Miller has covered my experience. In other words, you all know I am with him. I simply follow his instructions. With regard to removing the stars, we are able to do it. I found it took considerable time and considerable money, but as far as lye is concerned, or ammonia, that Mr. Forbes has referred to, I tried that and was not satisfied with my results there. I took some weak solution of lye and con-

siderable elbow grease, and I was able to remove the stars. We used dye, as Mr. Miller has said, to those curtains, and exposed them. We used different dyes, one I found much better than the others. In other words, we took the curtain and doubled it; half the "Pantasote" side would show and half the cloth side, and we exposed that to the sun, and thirty days' exposure showed several shades. So, as Mr. Miller has stated, I do not believe at present we have arrived at the point whereby it can be done satisfactorily. In my opinion, if you use ammonia, or any other strong liquid that removes the stars, it will virtually remove the goods; in other words the goods will be rotten when you get through. Elbow grease and a solution of lye or ammonia will do, but I doubt very much whether you will be able to repeat that.

MR. KAHLER: I was present at the meeting of the Advisory Board in New York, and Mr. Wels, the author of that question, was talking to me about this curtain business, although I have nothing to do with that class of work. I jokingly remarked to him at that time to atomize them and put on a flock.

MR. COPP: Up in my way the curtain business is all in the upholstery department. There is no renovation done whatever, as far as the Boston & Maine is concerned, and I think the New Haven do the same. They make Holland curtains and use them altogether. The Boston & Maine have a machine for cutting up the cloth and making the curtains entirely. It seems to me that is a good deal better way to maintain the curtains in coaches—to use Holland. It can be made very cheaply, and when it becomes soiled, throw it away and put on a new one. You can do it for less money than renovation, in my opinion, and maintain a better looking curtain.

PRESIDENT LANFERSIEK: Has any other member anything to offer? If not, we will proceed to the next subject, No. 2—"Piece Work—It's Advantages and Disadvantages From the Standpoints of Both Employer and Employee." The first paper is by Mr. W. K. Orr, of the Erie R. R., Buffalo, N. Y.

The paper was read by the Secretary, as follows:

MR. ORR'S PAPER.

Mr. President and Members of the Master Car and Locomotive Painters' Association.

The subject assigned to me for a paper is "Piece Work," its advantages and disadvantages to the employees and the employer.

I am not surprised that our Advisory Board took up this subject, for it has become one of the vital subjects that are agitating the labor world today.

I will endeavor to express my views on this question in as few words as possible.

In the first place the railroad companies turn out more work in the same time by piece work than they can by the day work plan.

Now, we take a shop that holds sixteen cars under the day work plan, this shop turns out thirty cars per month with a force of sixty-five men. Under the piece work plan

the same shop turns out forty cars per month, with a force of forty-five men.

This shows that they turn out one-fourth more cars by the piece work plan, which increases the shops capacity one-fourth, and gives the company the use of their rolling stock, from five to ten days sooner than under the day work plan.

Now, I do not say that they save the difference in wages, between the forty-five men and the sixty-five men, for the piece work men will make a better average in wages per month than the day work men, which will pretty well offset the difference, but they get one-fourth more work turned out by the piece work plan.

Now, I know that some of my brother master painters, who have never tried the piece work, will be skeptical about this statement, but I would say to them, try it.

Say you take four of your average men, then set your prices at just what it costs you now to do the work, and give them to understand that you will not cut the price on them, and just see what they will make.

You will see just how much more work they will do than they did under the day work plan. But you will hear some men say, "but you do not get the quality of work that you do under the day work plan." Now, I do not think this will hold good, for you will find that some of the best roads in the country are doing their work by the piece work system. You can look over their equipment and compare it with your own, and you will find that it looks just as good as your own does, and has not cost quite as much either.

I believe that another advantage to the employer is that you can keep a better class of men in your service. They can earn better pay by the piece work system than they can by the day work plan, that they are better satisfied. They know that they do not have to do some other man's work unless they get paid for it. Consequently they will stay with you.

I do not know of any disadvantage to the employer in the piece work system.

The advantage and disadvantage of piece work to the employee:

First. I claim that piece work is an education for the "mechanic." I remember when I was first compelled to work piece work. I say compelled, for we, that is the painters were told that if we would not do work by the piece they would get painters that would.

So we went to work with fear and trembling, as we thought we would starve to death. As we had always worked by the day, we never did any figuring for ourselves, but went to work at 7:00 a. m. and worked until 12:00 noon, and from 1:00 p. m. until 6:00 p. m. We considered that the company owed us our ten hours pay, not because we had earned it, but because we had worked ten hours. We did not know whether we had earned more than what we would receive, or, not so much. But after working piece work for a time we could tell all about it, and then it was as hard to get one of us to work day work as it had been to get us to work piece work. We had learned what we could do and what it was

worth to do it, and I believe this is the case with all men who have never worked piece work.

You can offer them 20 per cent more than the job is worth and nine out of every ten (10) men will not take hold of it, because they have not thought about it in that light.

Second. Take, for instance, two men working by the day. We will say "putting up a car." One man, to all appearance, works good and steady and the foreman can find no fault with him. He puts in the ten hours all right and the company owes him ten hours pay, but here is his companion, he is working with him and getting the same pay, but this man does one-third more work than the first man. At night he only gets the same pay as the first man.

Now, is that fair and just? But what can you do about it, under the day work plan? The rate of wages are set, and you cannot give the second man more pay, for that is his rate.

Therefore, I say that the piece work system is the only fair way to work and you can gamble that one man will not impose on another very much in this respect, or he will soon hear about it. You will find, that the men will find out for themselves the quickest way of doing the work when they are working piece work and what one does not know some other will know, and in this way they soon will become experts.

Then it gives a man a chance to make more money. He will work harder and steadier if he sees he can make more money by doing so. You will also find that the men will not stretch a job like they do when working day work. For instance, if they have a job that they could finish at 11:30 a. m., they would stretch that until 12:00 o'clock, rather than go for another job. But the piece work men will be after you if they get out of a job at 11:45 a. m. They will want something to start on after the noon hour.

Some disadvantages to the employee:

First. I would say, is the unfair way, some piece work prices are set. Now take a railroad that has four or five shops on their system. One or two of these shops will have good conveniences—such as stationary scaffolds, good light, etc., while the other shops will have no conveniences to speak of.

Now, it is unfair to the workmen in the latter shop to have to compete with the shop that have all conveniences.

For instance, a man or two men are sent to varnish a car or paint a roof, and they have to hunt up a scaffold and put it up. It will take a good portion of their time to do this, while the men in the other shops have nothing to do but to go ahead with their work.

The same can be said of a shop that is not properly heated. I have seen the temperature down to 50 degrees and men trying to put on a coat of varnish on a car. Any painter who has tried this will appreciate just what a job is and just how long it will take you to do it. While the other shops have good heat, the varnish works good and the men have no trouble with the varnish crawling or working hard. These men can make their money much easier, and I think that when prices are set for piece work these conditions should be considered.

There is one other disadvantage that I would like to speak of and it is one that exists in some shops. That is, the men are not allowed to know the prices of the work they are to do.

Now, I do not consider that this is fair to the workman for no man would think of working by the day unless he knew just what he was to receive. Now, why ask a man, who is working by the piece to work that way? At night he does not know how much he has made during that day, or in fact not until he draws his pay on pay day.

Yours respectfully,

W. J. ORR,

Master Car Painter, Erie Railroad Co., Buffalo, N. Y.

PRESIDENT LANFERSIEK: The second paper on this subject is by Mr. H. M. Butts, of the New York Central & Hudson River R. R., W. Albany, N. Y.

Mr. Butts read the following paper:

MR. BUTTS' PAPER.

PIECE WORK, ITS ADVANTAGES AND DISADVANTAGES FROM THE STANDPOINT OF BOTH EMPLOYER AND EMPLOYEE.

The successful adoption of piece work calls for patient effort and careful consideration and appeals equally to the judgment of both employer and employee.

Its thorough mastery is worth the best efforts of the brightest minds engaged in solving the intricacies of modern shop management. It has been wisely said that times change and we change with them. This truth is visible in the management of worldly affairs in general and is equally applicable to every detail of successful management of railroad work.

Glance for a moment at the panorama of changes which have taken place in the world's affairs in comparatively a short period of time. From the famous ride of Paul Revere to the message by telegraph or telephone; from the wooden gunboat to the modern battleship; from horse cars to subway express; from the canal boat to the 20th Century Limited. Indispensable as all these things are to our modern civilization, we well know that at their first inception they were met by stern opposition and were compelled to win their way into our affection by degrees. These changes have brought with them advantages and comforts of which our forefathers never dreamed. With these innumerable examples, for us to oppose piece work as an innovation without a practical trial would seem to be a retrogression quite out of spirit with the times, for it seems to be another step toward the Golden Era to which the American workman is steadily advancing.

In shop methods a new order of things is before us, small shops are being abandoned and the work is being concentrated in large central plants where special machinery and other facilities are being provided for the more rapid and economical handling of work. This permits a workman to remain upon one class of work a sufficient length of time to become thoroughly familiar with it, or in a word, a specialist. The all-around man who can do any kind of a job is no longer in demand, but is being superseded by the specialist who becomes proficient in his line.

Piece work gives to each an equal chance to develop his talents and to demonstrate his ability, which brings its reward in increased earnings. A shop well organized on the piece work plan to my mind has a tremendous advantage over the day work plan for it is manned with a corps of experts who are inspired with a zeal to work both mind and body for sure reward of individual effort. To be well organized means that both employer and employe should be banded together to work for their mutual interest.

But, in many instances, the adoption and successful execution of piece work is greatly hindered, not because the men dislike the plan itself, but because they know of many instances where some greedy employer has cut the prices as soon as the men earned a small per cent above their hourly rate.

Two things are absolutely essential and entirely indispensable to the successful adoption of piece work. The first is that no limit should be placed upon the amount a man shall earn. The other is for a fixed price with a guarantee for a certain number of years. Several instances have come under my personal observation where the management thought it wise to place a limit of 5 or 7 cents per hour upon the regular hourly rate paid. This plan, I believe, has always worked to disadvantage. Limiting the earning power destroys the incentive to increased effort. There should always be held out to the piece worker a positive reward for individual effort. Without this piece work becomes nothing more than stint work, which is very little if any better than working by the hour. Special reward for individual effort is the prize offered to the piece worker, and any plan which does not embody this as one of its cardinal principles is placed at a great disadvantage and is foredoomed, as it ought to be, to miserable failure.

This fact is becoming recognized more and more by the managers of the large railroad interests. In proof of this I will quote from an article recently written by Mr. J. W. Kendrick, third vice president of the Santa Fe R. R. He says:

"There is a great difference between men both morally and in skill and capacity. Of two men each selling his time to the company, one may close his eyes to everything effecting the company's interest except the minimum he must do. Wastes do not concern him. He does not go out of his way to take the stitch in time that would save nine. There is no tangible or overt act on which to lay the finger, but results are disastrous. The other man is wideawake, instinctively hates wastes and losses whether he is directly responsible for them or not. His mind is as active as his body. Such a man is worth much more than the other, but while the first one will go on strike and drag his fellow employes with him rather than submit to a small reduction of wages, not beginning to offset his wasteful methods, the latter can be secured and held by increased compensation."

Other railroad officials not only endorse all that Mr. Kendrick says, but go much farther, as is evinced by instructions issued by the general superintendent of motive power of one of our large railroad systems. These instructions guarantee a compensation (after it has been fixed on a just basis) for a

specified length of time, which insures the piece worker that his increased efforts are not establishing a record which will be taken advantage of by his employer and in the end work to his disadvantage.

The chances of the piece worker being taken advantage of by his employer in cutting prices would seem to me to be much less than when working by the day. No wise employer could possibly be so blind to the advantage of having the shop filled with expert contented workers who are exerting both mind and body to increase the output, who would run the risk of destroying their confidence and discouraging their efforts by cutting prices, instead he should do his utmost to inspire confidence in his men and this can more readily be accomplished by adopting a system of rewards based upon a plan which will allow every diligent and faithful worker to receive full benefit in dollars and cents for his increased effort. Money is the argument which appeals more keenly to the sensibilities of the man who toils for day wages than he who is able to count his wealth by millions. Nothing could be more discouraging or unfair than to limit the amount a piece worker shall earn after the price has been fixed. You may calculate with some degree of accuracy the capacity of the locomotive or any other machine, but you can never compute the capacity of a man. No two persons are alike in either mind or body; therefore, their earning capacity is never the same. Also, a man's individual capacity is continually changing from the fact that his output increases as he increases in proficiency, consequently he should be paid accordingly. No matter how much he earns the company is always being amply rewarded by the increased output.

When once a fair price is established for a given operation the employer should encourage the man to increase his effort to make all he can. A discouraged piece worker when he has passed through the experience of having the prices cut, simply because he has hustled will naturally plan to make the time fit the price and thus destroy all the advantage which otherwise might be gained.

One advantage which the piece worker gains over the day worker is the opportunity to demonstrate his capabilities for advancement; the man who increases the output by his own individual exertion is bound to be noticed.

An instance came under my personal observation where a superintendent of motive power came to his shop foreman and said, "Who is this man who is earning such big money working by the piece? He must be a hustler. I am looking for a man to fill a good, responsible position, and I thought I would like to look him over." It is said that opportunity to do better comes to every man at least twice in his life time. If this be true, the one who has demonstrated his fitness for advancement is sure to win.

If space would permit we might go into details to show the great advantage the shop organized on the piece work plan has over any other. After an experience of a number of years I am free to say that there is almost no limit to the amount of work which can be turned out from a well organized piece work shop. The greatest anxiety the foreman

has is to get work enough to keep his men busy. No time need be spent watching the men to keep them from idling, the men will be active in seeing that the work is finished in time. They are all practically in business for themselves, and are always very loath to take as partner any one who is not willing to do his share. Consequently, the lazy, indifferent workman soon loses caste among his fellows. With a good corps of honest, faithful inspectors the quality of the work likewise improves. The men soon find that it does not pay to do a job twice for the price they are to receive. Their ability becomes a matter of individual daily record, which inspires a sense of self-respect which is much greater than by any other plan.

These are only a few of the advantages which can be claimed for the employe.

The advantages which accrue to the company need not be further dwelt upon. A shop filled with a steady, well paid, self-respecting, ambitious, contented lot of piece workers means a shop which can be run up to its fullest capacity with no thought of discord, strikes or trouble of any kind, and to my mind is verging upon the ideal and should be welcomed by employer and employe alike.

Albany, N. Y.

H. M. Butts.

PRESIDENT LANFERSIEK: The third and last paper is by Mr. B. E. Miller, of the D. L. & W. R. R., Scranton, Pa.

Mr. Miller presented the following paper:

MR. MILLER'S PAPER.

Scranton, Pa., September 1st, 1905.

To the Officers and Members of the Master Car and Locomotive Painters' Association, Cleveland, Ohio.

The subject, "Piece Work, Its Advantages and Disadvantages from the Standpoints of Both Employer and Employe," has been assigned to me for discussion. It is an old theme which has been frequently debated, not only in our own meetings, but also in allied associations and conventions, in fact at nearly all gatherings of representative railroad men.

Opinion has been divided for and against the adoption of Piece work in railway paint shops. Exponents of the system have, at times, made wild exorbitant claims in its favor, which could not be substantiated, while those opposed in turn have frequently shown a disposition of unfairness and stubbornness which prevented their viewing the subject from an unbiased standpoint.

The introduction of the piece work system has, in many cases, proven a complete unqualified success, while in others it has resulted in utter failure. We are free to assert that in most cases where unsuccessful attempts at the introduction of piece work have been made, or where, after its establishment, the practice was abandoned, the failure was, in a large measure, due to inexperience, lassitude and lukewarmness of the head of the department or lack of spirit and hearty co-operation on the part of the middleman, or foreman, coming in direct contact with the men affected by the change.

The past twenty years' experience, divided by us about equally between piece work and day work, both as employe

as well as employer of labor, and being put in, as it were, on both sides of the fence, prompts us to unhesitatingly declare in favor of the piece work system in shops where conditions warrant its installation, as being advantageous to both parties.

Car paint shops with a monthly output of ten or more passenger cars; locomotive shops of similar capacity and freight paint shops turning out twenty-five or more new or repainted cars of different kinds, would be considered by us as favorable fields for the piece work system. Shops of a smaller capacity would probably be conducted with equally good success on the day work plan.

For the successful operation of the piece work system volume is necessary. The work must be subdivided and specialized. Men must become experts in various lines and kept at certain classes of work to the mutual profit of both employer and employe. The general all around man must, in a measure, give way to the specialist or expert in the different branches of the trade. He will be rewarded by increased earnings while, when once accustomed to the work, his task will be found no more arduous than under the old system of day work. There is no room for the drone or incompetent, he must either keep up with the procession or drop out entirely, making room for the more ambitious worker and the superior mechanic. Seldom, however, is this expedient necessary. Men with the requisite grit and stick-to-it-iveness succeed eventually and often prove the more valuable and better satisfied help being, in this respect, more desirable than the naturally swift or active worker.

There is usually more or less opposition, among workmen, to the introduction of piecework, and, frequently, much diplomacy is necessary to accomplish the desired end. Strikes have been known to result from injudicious attempts at forcing the issue. Experience, however, has taught that the most strenuous opponents of the system, and those who, in the beginning, are the loudest in their protests against the change from day work to piece work subsequently become the warmest advocates of the latter class of work and usually protest severely when asked occasionally, even temporarily, to return to the former system. This is an absolute fact and almost without exception.

Let us briefly touch upon the advantages to be gained by both employer and employe in the successfully operated piece work shop. The principal argument of the employer, in favor of the piece work system is, of course, the increase in production over the old system and a consequent reduction in cost. This is the inevitable result when piece work is introduced and conducted along practical lines. No matter how faithful a body of men may have been and how diligently they may have applied themselves to their daily labor under the old system, believing that further reduction was almost out of the question, the cost of nearly every class of work is easily still further reduced to a considerable extent when the change from day work to piece work is made. Men at once become resourceful creatures, they resort to every strategy, their brain is brought into active use and work is laid out and planned a long way ahead. Every advantage is eagerly

sought, no unnecessary steps are taken, no superfluous movements are indulged in, all of which costs them practically no additional effort, and not only are they, themselves, the gainers thereby, but the employer shares in the profits as well.

Another advantage which accrues to the employer is the fact that piece work is bound to give him a more proficient, more intelligent and better satisfied lot of men to deal with. Once the piece work system is established and in smooth running order very little friction is apt to occur and beyond an occasional dispute over a proposed new piece work price or the readjustment of an old one, little cause for wrangling exists.

The advantages gained by the employe are also of a substantial nature. The financial gain to him in dollars and cents, earned with little additional exertion on his part, is a convincing argument with him in favor of piece work, overshadowing all other points which might be advanced, and contributing substantially to his peace of mind and general satisfaction with the system. This gain in wages he would be loath to relinquish and, as previously stated, it would be a difficult matter to induce a lot of men who had been employed on the piece work plan for any considerable length of time to return to the old system of day work. A better satisfied and more contented complement of men than those employed, for a time, on the piece system it would be difficult to discover.

Besides the substantial gain in wages usually resulting to the piece worker, and which any fair-minded employer is willing to concede to him, the enjoyment of greater personal liberty and less stringent shop rules are important factors in causing the men to rally around the banner of piece work and make them permanent converts to the system. These remarks, however, must not be construed to mean that the introduction of piece work means the surrender of discipline and the abolishment of established working hours, shop rules, etc. Nothing of the kind takes place; on the contrary, strict discipline must be enforced at all times, no new rules are necessary, no old ones need be abolished, no leniency as to the required hours to be put in at work need be shown, but the fact is that hustling, pushing and driving which, at times, was found expedient under the old day work system, will now be found almost unnecessary, a condition which will be soon enough appreciated and thoroughly enjoyed by all workmen.

In a shop of this kind it is but natural that eventually matters are bound to run rather smoothly, improved methods are invented and numerous small labor saving devices are discovered by the men themselves and put into execution. Heretofore everything depended upon the foreman, his was the master mind to do all the planning, all the urging and, in fact, he furnished all the thinking power needed in prosecuting the work, but now he is materially aided along those lines by the men themselves, who do their own hustling and scheming, thus furnishing, unconsciously perhaps, a large portion of the brain work to the mutual advantage of both.

Having thus briefly touched upon the advantages of the system from the standpoint of both employer and employe,

let us in a like manner view the picture from the other side, and consider its disadvantages which, though slight and by no means numerous, are deserving of mention.

It has been claimed by opponents of the piece work system that inferior work was sure to follow its adoption and that carelessness, dishonesty and natural hoggishness of men would soon assert themselves to the detriment of good work and that incidentally everything would go to the eternal how-ows as far as neat, clean and first-class workmanship was concerned. To those we would say that nothing could be farther from the truth, and that experience not only has disproved this argument, but that frequently the reverse is true. If true in isolated cases we feel free in asserting that again the foreman is at fault and that improper organization and careless methods have been instrumental in bringing about the conditions. He may have been overloaded with work, he may be in need of a wideawake assistant or additional clerical help, and again he might have been negligent himself, for under no circumstances can the blame for careless, slipshod work be attached to the system, but it is invariably the result of shiftless or incompetent supervision. In the properly conducted shop the work is done not only as well but in many instances actually better than on the day work basis. These are not idle assertions, but indisputable facts based upon actual experience.

It will be argued by some that in a piece work shop the help is more or less tied up and that the foreman frequently is at a loss where to put his hands on a man needed here and there or on emergency work usually best performed by day work. He feels disinclined to disturb the piece worker, deeming it an injustice to pull him away from his work and asking him to stand the loss in time naturally incurred by changing from one task to another. The argument does not hold good and the seeming inconvenience instead of being a detriment is at times a blessing in disguise. The foreman usually devises some means of squeezing the odd jobs out of someone who happens to be disengaged or an apprentice is called upon to help out in the matter.

Speaking of apprentices. It is our opinion that they should at all times be worked by the day, and while we thoroughly believe in the efficacy of a properly conducted apprentice system the matter of apprentices should not be overdone. In our estimation the number of apprentices should approximate one to every eight or ten of all other classes of paint shop help. An excessive number of apprentices in a piece work shop would be apt to interfere with the successful and economic operation as such besides working an injustice to the boys who are there to learn and be taught and to whom we are looking for our future mechanics and piece workers.

The increased cost of supervision and clerical hire necessitated by the adoption of piece work is, perhaps, the only argument against the system worthy of serious consideration. All work must be thoroughly inspected and if a good sized force is employed, making it impossible for the foreman to look after these duties himself, an assistant or piece work inspector must be installed to relieve him of this duty. Clerical help will be found necessary to provide piece work sched-

dules from time to time, and finally all piece work slips should be carefully checked by competent office help after having passed the hands of the foreman or inspector and approved by them. This checking will be found necessary to prevent duplication and errors or attempts at dishonesty. However, as the increased cost on this account is counterbalanced many times over by the general saving effected in favor of piece work, the argument cannot be considered a valid one.

The success at piece work is due almost wholly to the wideawake diplomatic and experienced foreman, the man of patience and perseverance, a keen and observing, yet fair-minded person, ever ready to score a point for his employer at the same time treating with impartiality and fairness those employed under him. He must be free from arrogance and stubbornness and, if found expedient, willing to occasionally yield a point if fairly convinced that the interests of his employer are best served by such concession. Men of this kind are naturally scarce, especially those who have had a practical experience piece work. If you are without a man of this kind at your command it would pay you to make haste slowly. Do not attempt to make the change from day work to piece work with one bold stroke at a given time. Better introduce it gradually, sneak it in, as it were, using diplomacy. A little molasses here, a little persuasion there, and force if necessary at the proper time and place. Thus will you succeed and once with piece work in successful operation you will be convinced of the superiority of the system. The advantages will greatly overbalance the disadvantages and you will never think of returning to the old method of work.

Respectfully submitted,

B. E. Miller,

Master Painter, D. L. & W. R. R.

PRESIDENT LANFERSIEK: I have another short paper on the advantages and disadvantages of piece work, by Mr. Fred W. Bowers, of Kent, Ohio, and if there is no objection, I will have it read by the Secretary.

MR. BOWERS' PAPER.

President and Members of Master Car and Locomotive Painters' Association:

Although not a member of committee on subject No. 2, "Piece Work, Its Advantages and Disadvantages From the Standpoint of Both Employer and Employee," but at the suggestion of one of the members that I give my experience on this very important subject in which we are all interested.

When we consider carefully the importance of this subject, it can readily be perceived that piece work is the first and essential step to the solution of the problem, as to the amount and compensation an employe shall receive for each piece of labor performed by him, also the quality he is expected to give in return for the same.

Before piece work was fairly introduced and given a just trial, it was objected to and discouraged by some on account of a scheme to get more work, regardless of quality, especially employes looked upon the same with mistrust, as they thought it a stab at their wage rate, but now the go-ahead

class of mechanics in shops where the piece price problem has been solved, are satisfied and would not welcome the return of the former system of day work.

There are some certain operations in the railroad paint shop that cannot be successfully performed under the piece work system, but they are few. Among them I might mention matching of colors, touching up after the trimmers, steam fitters, carpenters, etc.

The question sometimes arises, Does the quality of work performed by piece work compare favorably with that performed by day work? to which I reply in the affirmative, provided, however, that a rigid system of inspection is enforced and the prices are fair. Neither can the shop on the day work plan, minus of an exacting system of inspection, as the reputation of every shop, irrespective of what wage system governs the same, hinges on that point.

Increased "output" at a decreased cost over that of day work is really the object of piece work system and in maintaining the increased "output" at a decreased cost, the mechanic is not selling "output" but skill and ability to create the same. "Output" is what the motive power departments are seeking when considering the usefulness of the paint shop, and "output" is what the piece work system is furnishing.

Another praise worthy feature of this system once fairly worked out and put into practice, is that it creates a sense of partnership between employe and employer, in which the interest of one comes to be the recognized interest of both, and I think it is the only modern and profitable method of conducting shop operations, employer and employe being considered alike.

The best recommendation to be offered in its behalf is the statement that both foreman and men having been once profited by this system, are opposed to its abandonment, as it stimulates energy and makes each a contributing factor to the total capacity of the paint shop.

Fred W. Bowers, M. C. P., Erie R. R.

Kent, O.

PRESIDENT LANFERSIEK: Gentlemen, before we proceed to the discussion of this subject, I want to say that we have with us this morning Mr. A. B. Phelps, President of the National Maintenance of Way Painters' Association of the United States, and I know will all be pleased to hear from him. Gentlemen, I have the pleasure of introducing to you Mr. Phelps, who will now address you.

MR. PHELPS: Mr. President and gentlemen of the convention of Master Car & Locomotive Painters: I slipped into the room as quietly as I could. I did not want to disturb the meeting, and I am sorry that I did. I did not want to be seen and I did not want to be heard, but Mr. Brown was a little too much for me. I can only say that we have a small organization similar to your own. We call it the Association of Maintenance of Way Painters, which will meet in Cincinnati on November the 14th and 15th, and as a representative of that organization I greet you heartily, and offer you the best greeting that we can. I would like it, if you consider it best, if you would send officially one or more representatives to

the convention down there, and I hope that each member of this organization will consider that he has a perfect right to come, and will be welcomed if he will attend that meeting at that time, and as we are very young and you are old and prosperous we simply will ask an interest in your prayers. I thank you. (Applause.)

PRESIDENT LANFERSIEK: Subject No. 2 is now ready for discussion.

MR. LORD: I would like to say that the papers that have been read on piece work were very interesting. The shops that I am connected with are on piece work, and I cannot see from hearing those papers but what they have expressed my views to the letter. There are few subjects but what they have covered. There were points in Mr. Orr's paper where he said men worked without knowing what they were going to receive. We are obliged to give every man a book of the prices they are to work for, so that each man knows just exactly what he will make and what he is getting for his job. So that there is no trouble in that respect. There were many points touched on in those papers that were interesting to me because I have been through the same experience, being called up to answer why one man was getting more pay than another at the same price, etc., and the men that are on piece work understand very thoroughly why they do. It is because one man will do his work a good deal easier and quicker than another, and accomplish more and get more out of it. I can heartily say that if I were to return to the day wages, I am afraid I would have to get new men to go to work for me, and I am convinced that piece work has come to stay. It is the only satisfactory way that we can do our work. It is of more benefit to the company. You can turn out more work and get better results. The men will make more pay and you are not required to have nearly as many men to do the same amount of work as on day work. So I am satisfied that piece work is the satisfactory way of doing it.

MR. GOHEN: There is a little matter I was requested to bring before the Association, and it won't take but a minute. A number of the members have gone personally to the representatives of The Sherwin-Williams Co., and said they would like to visit their place if it would be agreeable to them, and they asked me what I thought about it. I told them I thought it would be eminently proper. That is one of the representative concerns in the country, and is located here in Cleveland and they have extended an invitation on the request of these parties to all the members of the convention and would like to have you go over there tomorrow afternoon. They have gone into the matter of seeing whether it could be arranged for the convention to go there—that is, with the supply people, and they have arranged satisfactorily in that way. I presume they will have a little treat of some kind for you, and I have been requested to put it before the convention, whether they wish to accept the invitation of the Sherwin-Williams Company to visit their works tomorrow afternoon. I will say to those of you who have never been there, that it will open your eyes. It is a great concern, and they have many ways of doing things over there which are mysteries if you have not seen them.

PRESIDENT LANFERSIEK: You have heard the remarks of Mr. Gohen. A motion to accept or reject the invitation of The Sherwin-Williams Company is now in order.

MR. STOUT: I move we accept the invitation.

The motion was seconded and carried.

PRESIDENT LANFERSIEK: Gentlemen, I believe the papers read on No. 2 covered the ground very fully, and I think any further discussion is useless. We will therefore pass to the next subject, No. 3—"The Best Material and Method in the Construction of Paint Shop Floors That Give Best Results From the Painters' Point of View." The first paper is by Mr. J. W. Houser, of the Cumberland Valley R. R., Chambersburg, Pa.

Mr. Houser read his paper, as follows:

MR. HOUSER'S PAPER.

Chambersburg, Pa.

The best material and method in the construction of paint shop floors that give the best results from the painter's point of view.

I believe the idea of this subject is to get the opinions of the painter in regard to such floor as he has had experience with. My early experience in this direction was with plank or wooden floors. My later experience has been with a more modern and substantial one, namely, vitrified brick laid with cement. This floor, if properly constructed, will give very good results and can be laid at a normal expense, about \$1.40 per square yard, and after the first cost, the expense of maintenance is practically nothing for years.

The shop I refer to has a floor of this kind which was laid eight years ago, and up to the present time has not cost one cent for repairs. It is easily kept clean, as it can be flushed with water at any time and if properly drained when laid, will dry off in a few minutes. After eight years' experience with the floor referred to, we think we have one of the best, if not the very best, that can be had for a paint shop.

At first we were in doubt as to what effect this floor would have in the temperature of the shop in cold weather, but found to our very great satisfaction that it is all right. The bricks seem to absorb the heat and we do not have any trouble in maintaining almost any degree of temperature which is desired, on account of the perfectly dry condition of the floor. Our shop is practically free from dampness and thus far we have not had any trouble with varnishes or colors drying. Very respectfully,

J. W. Houser.

PRESIDENT LANFERSIEK: The next paper is by Mr. F. A. Weis, Central R. R. of N. J., Elizabeth, N. J.

The Secretary read the papers, as follows:

MR. WEIS' PAPER.

Elizabeth, N. J., August 28, 1905.

Mr. President and Members of the Master Car and Locomotive Painters' Association:

Gentlemen: With reference to the relative merits of the various floors for paint shops, viz: Cement, asphalt, block and plank.

Having had considerable experience with all of the above mentioned floors, can safely recommend:

First: Cement; because when properly installed, will remain hard and smooth and the generation of dust therefrom will be very small; is absolutely fire-proof; will absorb very little water, insuring against dampness; is easily kept clean, and in ordinary paint shop service requires practically no repairs. I might emphasize the fact that the proper installation is a very important factor.

Second: Asphalt; but it is inflammable; hard to keep clean; will become soft in warm temperature, at which time it is easily indented.

Third: Wood block; but the wood must be chemically treated to prevent rotting within a very short time; must be perfectly laid; filling all spaces between the blocks flush with the top surface of the blocks; it is practically impossible to keep the top surface smooth. Again, it is absolutely necessary to have good foundation under the blocks or there will be a tendency to settle in spots, causing ruts or uneven surface. Wood blocks absorb moisture easily, creating dampness. On account of the necessity of building a good foundation under the wood blocks and the repairs necessary, the cost would be as great, if not greater than cement.

Again, wood block is inflammable, which is no small item in a paint shop. Therefore the cement floor is not only much better, but cheaper as a paint shop floor.

Plank makes a poor floor at best.

Cost of Modern Floors: The cost of a cement floor, both as regards first cost of installation and maintenance is less than asphalt or wood block, therefore, I am heartily in favor of the cement floor for paint shop.

In my opinion the best method of construction of paint shop floors is as follows, provided cement or asphalt is the material selected for the purpose:

All drains to be under floor.

One drain under each car, in center, both as regards track and car, (see sketch No. 1), with sanitary trap, the floor to be one and one-half inches lower than top of rails at highest points. This height to be maintained along inside of rails, but to be depressed in center on a gradual slope toward drain opening in floor, both from rails and ends of tracks, see sketches Nos. 2 and 3.

The floor between the tracks should slope from rail, at which point it should be flush with the top of rail, up at an angle of one-quarter of an inch per foot (see sketch No. 4).

Respectfully submitted,

F. A. Weiss,

C. R. R. of N. J.

PRESIDENT LANFERSIEK: The third and last paper is by Mr. J. H. Whittington, Chicago & Alton R. R., Bloomington, Ill.

The Secretary then read the paper, as follows:

MR. WHITTINGTON'S PAPER.

To the Master Car and Locomotive Painters' Association:

Gentlemen: The subject assigned me is a very difficult problem for a painter to handle, inasmuch as this subject usually comes under the supervision of mechanical engineers, whose duty it is to prepare plans and specifications along these lines to be worked out by practical mechanics in the building department, and these plans are seldom referred to



J. W. HOUSER, SECOND VICE-PRESIDENT.

the master painter for his approval, or is he asked if he has any suggestions to offer.

In most cases the floors are made, and the master painter told to go in and paint cars, if we were given the least consideration in these matters I think the main aim would be to see that the foundation would be equally as good as priming coats on a car, as it is a very sure case of faulty work if the foundation is not properly prepared and put down right. From a painter's point of view as to the best methods and material employed in the construction of a paint shop floor, I will treat to the best of my ability. From a sanitary point of view, I prefer a concrete floor, as the health of our employes must be looked after, as the quality and quantity of the work largely depends on the convenience and the good health among the employes. From experiences I have had with both wood and concrete floors, I find it is not practical nor healthful to have a wood floor in the shop, as it is generally known that wooden floors absorb and retain a certain amount of all infectious liquids that fall on it, and some of it will go through the floor through the numerous openings, and stays there unmolested and produces diseases in the shape of malaria and fevers; whereas, if you have a good concrete floor with the proper drainage and sewerage, this detriment is easily overcome by simply washing the floor with a weak solution of potash, flooding it with a hose, and it soon presents a neat, clean appearance at all times. If kept sprinkled, and occasionally a small amount of some good disinfectant is added it will not only keep the dust settled, but will add greatly to the health of your employes.

I wish to refer you to the Illinois Central Railroad paint-shop at Burnside, Chicago, which is one of the most complete railroad paint shops in the west.

The following formula, I think, if carried out, will give entire satisfaction. Cement or concrete floors should be laid as follows: The ground should be leveled off about 10 inches below the finished surface of the floor, and well settled by ramming; a foundation five inches thick should then be laid, of either coarse gravel, stone chips, sand or coal ashes well tamped or rolled with a heavy roller. The concrete should then be prepared in the proportion of one part of cement, two parts of sand and three parts of gravel, mixed dry; then a sufficient quantity of water is added to make a stiff mortar; this concrete should be spread in a layer from three to four inches thick and should be well tamped. Before the concrete has set, the top or finishing coat should be laid, and only as much concrete should be used as can be covered with cement the same day, for if the concrete becomes dry on top, the finishing coat will not adhere to it. The top coat should be prepared by mixing one part of the best Portland cement and one part of fine sand, or clean, sharp, crushed granite, or flint rock. The material should be thoroughly mixed, dry, and water added to give the consistency of plastic mortar; and it should be applied with a trowel one inch thick and carefully smoothed and leveled on top between straight edges laid as guides.

This, I think, will make a good, lasting floor.

Respectfully,
Bloomington, Ill.

J. H. Whittington,
Chicago & Alton Railway Company.

PRESIDENT LANFERSIEK: Gentlemen, the subject is now ready for discussion, and we would be pleased to hear from any of the members.

MR. MILLER: I would like to hear from some of the members having concrete floors in operation. I have visited a number of shops where floors of this kind have been installed, and it seems the universal opinion that the concrete floor is a very dusty thing, especially where the place is heated by the hot air system. In my opinion, vitrified brick floor is the thing on account of the objection just mentioned to the concrete floor. In this opinion I know I am upheld by a number of the members. I do not know whether they are in the room or not, and I would like to hear from some of them on the concrete floor question.

MR. LORD: I would like to ask if anyone has any trouble or complaint from their men of their feet getting sore from traveling around on this concrete? I met a man on the train coming out here that is connected with an establishment at Beverly, Massachusetts, where the whole establishment is made of concrete from the foundations to the top of the buildings, and he said he was obliged to leave his job on account of his feet getting so sore in traveling around on the floor that he could not work, and could not stand it, and there were a number of men affected the same way. This is the first time I ever heard anything of the kind.

MR. MANN: With regard to dust getting on the concrete floor, in our shop we have a concrete floor, and we did have some trouble in keeping the dust down, which would accumulate. First I got a broom and had the men sweep the shop, but that did not seem to be successful; we got then a large brush about eighteen inches long, and that made very good success, but the best thing I found was coal oil and saw dust mixed together sprinkled over, then take an ordinary broom and every particle of the dust was removed without any trouble.

PRESIDENT LANFERSIEK: Do you have any complaints from the men about their feet?

MR. MANN: In reference to that, I cannot say that I have had any experience, or heard of any trouble. Once in awhile I get tired myself standing around when everything is going lovely. (Laughter.)

MR. MORRIS: We never have any complaints about feet getting tired; in fact, when the whistle blows the men run and are quite in a hurry to get off their overalls. As for dust, we never have a particle of dust. We have a drain under ground. It is perfectly clean and we have never had any trouble about dust.

MR. HUTCHINSON: I am much interested in this floor question. I am located at London, Ontario, and we have there practically a new shop, unfortunately we have a plank floor, and therefore I am in hopes in the near future of getting the best floor, so you can understand that I am interested in this question. But as Mr. Miller suggested a vitrified brick floor and the gentleman who spoke previous to him referred to complaints made by the men about their feet being sore, I would say that in our stock room we have a brick

floor. It is not a new building, it belonged to the store department, and we fell heir to it, as it were. My stock men have complained about the brick floor, and I am anxious to hear, of course, from those who have had experience in this line, for the reason that if there is anything in this, we want to decide, of course, on the best floor. We have the plank floor in the shop, and I need not go over the disadvantages of a plank floor; you all know them well but so far as a brick floor is concerned, it just occurred to me, as that gentlemen has mentioned it, that my stock men and the men in the sash room, which has also a brick floor, have made complaints about the brick floor. If it were possible, I think, myself a brick floor would be the best floor, for several reasons; one reason in particular would be the dust, and another reason would be that perhaps if the floor were damaged it could be repaired very easily, and I therefore think the brick floor would be the best floor, if it could be made smooth, so that the low parts, where the bricks join which naturally make ridges, would not affect the feet or injure the feet in that way.

MR. HOUSER: I can readily see that there might be some complaint from the stock-keeper, but the stock room should be a proper one. Now, in the shop they are on a scaffold and off a scaffold; they are not on the floor constantly. They would not average half a day on the floor. We have had a brick floor in the shop for eight years, and I believe I have yet to hear the first complaint from any of our men in that direction. Now, we have vitrified brick and I do not think we are having any trouble keeping it clean. Sometimes it gets a little dirty, but I guess that is partly my fault and the sweeper's fault, but it can be kept clean. As far as injury to the men is concerned, I do not believe we have ever had a complaint, but in the stock room, of course the stock-keeper is on the floor constantly, he does not get any change at all; it is simply one thing all the time, and I believe that it might be injurious, but in the shop, I do not believe it is injurious.

MR. CLARE: I have worked on a brick floor for six years, and I would say that brick is much preferable to a smooth finished or cinderlithic floor for this reason: The paint shop proper was brick and the stock room was smooth finished, and having left a board floor to go to this shop, I soon found the difference. In a month's time I was so crippled I could hardly get about until I had become more accustomed to it. On a smooth finished or cinderlithic floor, it is just about like trying to walk on ice. I think that is one of the things that make the men so tired and the floor objectionable to them. I think that is a question to be considered, whether we ought to have a smooth finished floor. As for the dirt, I do not see that there is much difference. Both floors will get an accumulation of dust.

MR. MILLER: As I understand it, the objection to the concrete floor, from the standpoint of creating dust, was on account of the softness of the concrete or the preparation with which the floor was finished. Continuous sweeping would loosen up the fine dust and particles of concrete would be blown around the shops. I have had men tell me they could

sweep the shop perfectly clean, go from one end to the other, then go right back and start over again, and they would have just as a big a pile, and they could keep that up all day. It just loosens it from the floor probably because the floor was not put down properly, not enough cement used, perhaps, and that I find has been the greatest objection to the cement floor. We have with us Mr. Shore, of the Lake Shore, who has recently been installed in new shops at Collingwood. I should like to hear from him on the concrete floor question. I understood you have them?

MR. SHORE: Yes, sir. I would say it is harder on the men, especially where they have got to be chasing around all day. It is a strain on your feet. We have got concrete and we have got a grating there, which I do not approve of. I think we made a mistake there, because the dirt goes there, and you have got to lift that up and it costs time and money to clean them out. I was only sorry that some of the members here were not up to our shop to see the scaffold we have got. I think we have a scaffold that is all right, with one exception, and that is, we have got it a little too close to the car. A draughtsman made that (Laughter), and he did not consult the painter. So we put it up. We found when we first started they had three boards, and the man could not stand there, and when he got down to the baggage car he would be liable to fall off. We finally lengthened it, and put it to the upright, with a weight and cable to it, and a little button to pull out, which catches it at the height you want. As to our stock room, I must say we have a very nice stock room.

MR. COOK: What has been your experience as to dust.

MR. SHORE: Our tanks are put on one side and the varnish, oil, turpentine, etc., room is back of that. We have an elevator running up and down on which we put all the barrels. We have a great many shipments over the road, for we supply a great many roads with material on our line. We are not bothered much with dust.

MR. ROSCOE: For the last three years I have had experience with a cement floor in the paint shop, and previous to that we were on an oak plank floor. We have got no paint shop; we do the carpenter work and paint work under the same roof. As far as dust is concerned, we are well fixed for dust. We also overhaul the trucks in the paint shop. You know how grease and dirt accumulates on the trucks, and drops on the cement floor and remains there until somebody sweeps it up, but for all of that I would not give up the cement floor for anything we had previous to that and as far as sweeping the cement floor is concerned, the dust and cement you sweep off of that is nothing to speak of. It is laid with good cement and adheres. Again, it does not crumble off. At times when our shop is emptied, to keep the floor good and hard and free from dust, we take some drying oil, put it in a sprinkler and go over the floor. Sometimes they use Japan oil. I find that to be very good to keep the dust settled. As far as I am concerned, I would not "swap" the cement floor for anything we have had experience in for a paint shop floor.

I do not know anything about vitrified brick for floors, but with regard to some of the people complaining about their

feet getting tired by constantly remaining on the cement floor, in the sash room, where they work at the table or bench, they lay carpets down and stand on it, and that makes it a little softer, and protects their feet in that way. For those who have tender feet, as they call it, I could recommend rubber heels or cork soles for them. As far as I am concerned, it never gives me any trouble. I have walked on it for the last four years, and do not feel any bad effects from it yet.

MR. BROWN: Mr. Dutton has a floor in his shop. I would like to hear from him.

MR. DUTTON: Concrete seems to wear off constantly. We use, instead of brooms, brushes to sweep it off. I would prefer a brick floor or something of an asphalt nature.

MR. QUEST: I think I replied to a communication from Mr. Miller, and I do not know just how far I committed myself in that reply. But we have never had any trouble or complaints from the men having sore feet from standing or working on the cement floor, but we did have some little trouble from the floors, as they were, becoming saturated with the stuff running down off the side of the car, and it became so smooth and slippery that there was danger of throwing people; it would get very slippery. We tried a broom at the beginning for sweeping and abandoned it for a brush, as referred to by one of the previous speakers. We have a mechanical heating and ventilating system, and of course if there is any deterioration of the floor—that is, through loosening it up—we have got that trouble. To overcome the slippery and smooth feature of it, we occasionally use a lye solution and go over the floor. The base of our floor is concrete and the top is cement, presumably put down, as suggested in one of those papers, so that it was a thorough amalgamation of concrete and cement. That I suppose is done to prevent the top layer separating from the lower layer. Our floor slopes down into a thirty-inch pit. We have pits in our shop, and we have no trouble from the water lying on the surface, and I should judge that there would not be any trouble in cleaning off the floor if you used old abandoned carpets or something of that kind under the car; in fact, lately we have resorted to that in order to save some lye cleaning.

MR. HUTCHINSON: Proper drainage is something we ought not to forget about.

MR. QUEST: Our floor drains into pits—that is, the water from washing the cars drains into a thirty-inch pit. Our shop is longitudinal, and the pit extends the full length of the shop, and the drainage opens in the center of the pits.

MR. COWAN: We have had new shops, and I was very much disappointed that we did not get a cement floor. There is only one section that has a cement floor. I found no trouble from the men from that floor, and have had no complaints at all. As for the dust, I found as much dust with the wooden floor as I do with our cement floor. The only place I ever heard a complaint from, was in the stock room. Our stock room and pattern room are together. The men in the pattern room have found it kind of hard on their feet, and they used pieces of carpets, but in the section that we

have got for washing, and doing varnishing now and then, I have heard no complaints.

MR. SHORE: Speaking about the stock room, puts me in mind that I painted the floor, and there is no dust in there at all. Take the cellar in your own house, it will accumulate dust all the time. In my stock room I painted it from one end to the other. Probably once in two months I give it a coat of paint, still it is a stone floor just the same.

MR. BURTON: I have worked in shops where the floors have cement, and shops where they have been brick, and I believe this talk about hurting the feet is all bosh. A fellow wood or a cement floor. No one has spoken about the cement. Do you mean to tell me that there is more spring to the cement, that it is easy on the fellow's feet? Does a plank two inches thick give when you walk on it? The very fact of walking on brick makes a fellow feel he is getting something unusual. It would hurt him just as bad if it were wood or a cement floor. No one has spoken about the cement cracking. I visited several shops yesterday and noticed where the floor had cracked all around. You do not see that in a brick floor. As far as the dust question is concerned, I see no difference. In the vitrified brick floor, it is well grouted, as they call it, with cement. This gentleman over here spoke about painting the cement floor. I want to talk to him. I am up against that now. I was called on to paint our engine room, which has a cement floor, and I have been scratching my head. They want something there that won't come off. If you have something to paint a cement floor that will stay I want to talk to you, (referring to Mr. Shore).

MR. RODABAUGH: I have a cement floor in our shop and have had it for about twenty-two years, and it is as good to-day, most of it, as when it was put down. I have never had any trouble about dust, and never heard anyone complain about sore feet. If anybody has sore feet in a paint shop he must be either constitutionally tired or working on day work. (Laughter.) I prefer the cement floor. I have worked on both—three of them—brick, plank and cement, and I have never seen anything to excel the cement floor in a paint shop. You can keep it clean, it is always nice and in good order, with very little labor. There is no labor at all to keep it clean. I have never had the trouble that my older brother there speaks of, and cleaning it off with lye. We never had any trouble except around the mixing table. He uses different material and it drops down and accumulates there, but we do not use that kind of material, (Laughter).

MR. PITARD: This is a very important question. For a good many years the wooden floor was in use and I know there has been a gradual change, and the tendency is toward the concrete floor. In our shop we have a wooden floor made of pine, and I think in the last eight or ten years we have had about two new floors put down. It decays very readily. I am down in that section of the country from where you get your yellow pine and turpentine. The pine is bled and it decays much quicker than if the turpentine were left in. Where it has been bled and put in a position where it is constantly subjected to dampness, it rots much more readily. In my shop I have noticed in the morning in opening the doors there

was a very bad odor in the shop arising from the rotting of the floor, and, naturally, fevers will be the result in such cases. For that reason I favor the concrete floor. As far as the inconvenience to the feet is concerned, you know when you change the surroundings of some people, about the first thing they look for is the disadvantage rather than the advantage, and, as the saying goes, some people would kick if they were playing football. It is very important that the sentiment of this convention be clearly understood on this point, for the reason that it may decide the destiny of some other member when he makes application for a concrete floor. Therefore, I move you that it is the sentiment of this convention that the concrete floor is the proper thing for paint shops.

The motion was seconded.

MR. MILLER: Am I to understand that the brick floor is to be discriminated against?

PRESIDENT LANFERSIEK: Yes.

MR. MILLER: I would offer an amendment to that motion—that concrete or brick be suitable for paint shop floors.

MR. PITARD: I will accept the amendment.

MR. RODABAUGH: I would offer an amendment to the amendment—that the word "brick" be left out (Laughter).

PRESIDENT LANFERSIEK: The motion now is, that it is the sense of this convention that either cement or brick is the most suitable for paint shop floors if properly constructed. The motion was carried.

PRESIDENT LANFERSIEK: We will now pass to the next subject, No. 4—"Are you burning off your passenger equipment before it is necessary?" The first paper on this subject is by Mr. Albert V. Locke of the Brooklyn Rapid Transit R. R., Brooklyn, N. Y.

The Secretary read Mr. Locke's paper as follows:

MR. LOCKE'S PAPER.

"Are You Burning Off Your Passenger Equipment Before It Is Necessary?" is a question of importance to the management of every road, although, perhaps, it is given too little attention as a rule.

Treating the subject in a general way, I should answer, no, we do not burn off our equipment before it is necessary. It is my observation that most roads in their desire to keep expenses down and get all that is possible out of the paint, run the cars too long before revarnishing; necessitating the cutting in of the bodies, when if treated at the proper time, touching up and a coat of varnish would have been sufficient. Repeated coating in this manner causes cracks, and each succeeding treatment adds to the depth. When it is finally decided to overhaul and repaint, the question arises: shall I burn off the paint? Perhaps I can better illustrate my personal opinion by telling you what we are doing on the Brooklyn Rapid Transit. Our cars had been running from six years to a period back beyond the memory of man, and were in all kind of conditions; out of 493 that have been through the shop for year ending September 1st, 1905, 313 were burned

off, and the varnish removed from the inside, and I am positive that in no other way could we have obtained the results required by our mechanical department. Although we have experimented (as I suppose all painters have) with knifing surfaces, etc., with varying results, I have yet to learn of a method of filling cracked paint and varnishes so it will "stay filled," and not open in time deeper than before. When conditions are not so bad, as in case of perishing or when the paint and varnish is simply worn out, if the car is shopped at the proper time, I think very few master painters nowadays would recommend the use of the torch, but instead would give the work a good thorough sand-papering, removing everything in the shape of loose paint or putty, after which the usual method of building up would be followed with results equally as good as though the paint had been burnt off, and of course at much less expense.

We of the elevated branch of the business have troubles that the steam surface roads know little of. With a continuous and increasing traffic that taxes the equipment to the limit twenty hours a day, 365 days in the year, with no dull season, there is no time when the operating department does not need every available car. Under these conditions it is easy to guess that our cars are allowed to run too long before being revarnished, and when it is taken into consideration that our stations are only four or five city blocks apart, with all that implies in the way of scratches and bruises, I will leave it to you to imagine the proposition confronting the master painter on an elevated railroad.

I am aware that papers are to be presented here today by gentlemen of wide experience suggesting a method of treating cracked paint without burning off, and while I admit I am a little skeptical, I hope to learn of a way to do this work successfully. Respectfully,

Albert V. Locke,

Master Painter, Brooklyn Rapid Transit.

PRESIDENT LANFERSIEK: The next paper is by Mr. A. J. Bishop, of the Northern Pacific Railway, St. Paul, Minn.

Mr. Bishop read his paper as follows:

MR. BISHOP'S PAPER.

President and Members Master Car and Locomotive Painters' Association:

Gentlemen: Having accepted the privilege of replying to query designated as topic No. 4, a topic selected, I presume, for discussion at this convention, I feel that I can readily answer the query, "Are You Burning Off Your Passenger Equipment Before Necessary?" without going into detail. Speaking from experience I have had during my service with the Northern Pacific Railway Company, I answer, No; and in making this reply I do so feeling that I have sufficient data to warrant my taking a firm stand and in making reply make it an emphatic No. In order, however, to make this topic one of some interest and, if it be possible, succeed in bringing out statement of facts where by the service life of the painting upon the equipment may be lengthened, I shall feel as though the little which I may have mentioned has been the means of bringing out something promulgative for better results.

During the year 1896 I burned off and painted sixty-five cars, of which three were business cars, one a postal car, two combination mail and express cars, three express, seven baggage and thirteen emigrant and tourist cars, sixteen coaches, six dining and fourteen sleeping cars, of which there has been burned off since owing to various causes, the following:

- Business cars, 1, account reconstruction, service 6 years.
- Postal cars, 1, account reconstruction, service 5 years.
- Express cars, 1, account reconstruction, service 6 years.
- Baggage cars, 1, account being wrecked, service 4 years.
- Baggage cars, 1, service 8 years.
- Baggage cars, 2, service 6 years.
- Emigrant and tourist, 1, account reconstruction, service 3 years.
- Emigrant and tourist, 1, account being wrecked, service 5 years.
- Emigrant and tourist, 1, service 8 years.
- Coaches, 2, account being wrecked, service 4 years.
- Coaches, 1, service 5 years.
- Coaches, 1, service 8 years.
- Dining cars, 1, account reconstruction, service 3 years.
- Sleeping cars, 1, service 6 years.
- Sleeping cars, 1, service 7 years.
- Sleeping cars, 5, service 8 years.

Thus showing that out of the sixty-five cars burned off during 1896, twenty-two have again been burned off, majority of which show a service of eight years, the balance forty-three cars being still in service. From such a showing it can readily be understood why I feel the right to claim that cars are not being burned off unnecessarily. During the years following the foregoing the number of cars burned off were, during 1897, sixty-two, 1898, thirty-eight, 1899, twenty-five; 1900, fifty-nine; 1901, thirty-six; 1902, fifty-one; 1903, forty-eight; 1904, thirty, and for the first six months of 1905, forty. The ratio of service of these years comparing favorably with the service shown for cars burned off during 1896. This data is taken from the records of output from our Como shops, St. Paul, Minn. While we here present figures to establish a ratio to show that cars are not being burned off unnecessarily, the question naturally arises, how about the condition of these that have not been burned off during these nine years. To reply to such a query, I will say that not all of these cars have a piano finish at this time, many are not perfect, there are quite a number of cracked surfaces among the lot, but the majority of these surfaces have a very fair appearance and indications are that many will not need be burned off for months and possibly a year or two yet to come. Our equipment are practically in continuous service when not shipped, and the territory through which they travel passing through the fertile fields of Minnesota, the bounteous acres of North Dakota, the Bad Lands, the barren waste, the alkali district, and again the wealth producing Rockies of Montana, the rich and productive valley of the Gallatin, again into the picturesque Rockies, winding its way through rocks, forest and glen, piercing the very bowels of Mother Earth, passing

through the sandy sage brush desert, being redeemed by irrigation, in Idaho, emerging into the richness of the heart of the Yakima, and then into the beautiful Kittitas valley, again entering into the higher elevation, crossing the Cascades, then descending into and through the great timber lands of Washington and Oregon, coming to a final terminus to prepare for the return voyage into the lower elevation, the warmth and the climatic beauty of the western ocean, giving to the outside of the equipment such a variation of temperature and atmosphere, passing in the trip through sunshine and rain, snow and sleet, wind and storm, heat and cold, variations which can not but have more or less detrimental effect upon the surface, and is such as to be very trying upon the outer surface, i. e., the varnish, and yet our average service between shopping is not less than sixteen months, this equipment in transit making a continuous run of more than 2,000 miles, leaving St. Paul at an altitude of 710, passing through higher and lower altitudes as the distance is traveled, reaching an altitude of 5,565, and terminating at Portland, Oregon, at an altitude of 39, this difference in altitude bringing to the surface variation in temperature and atmosphere the effect of which may readily be realized by the imaginative. I might, if necessary, show among this number of cars quite an assortment of classes that were burned off and painted after having had a service of only two or three years, and these cars were not burned off before necessary. In fact, the surface condition of these cars were in far greater need of removal than we are now able to find upon cars having nine years' service. I am thankful to be able to say that these cars are not of our painting. However, these facts are to me a distinct demonstration that it pays to do work right in the beginning, using good and sufficient stock, properly applied for proper surfacing and protection in the first painting. It is to us a well known fact that whenever new equipment is purchased that it matters not how careful and exacting the specifications may have been worded the product does not pan out, and results are as heretofore shown, the necessity of burning off cars having had a service of only two to three years. This behooves me to say that I might reply to the query, "Are cars being burned off before necessary or more often than necessary?" Yes; because I do not believe it necessary to apply paint that will not give a longer service than two or three years. It is not only unnecessary, but it is an absolute waste of both labor and materials. Besides this, it certainly does not place those responsible for this state of condition in a very high estimation with those to whom they thus become known or with those who later handle these cars, and are compelled to burn off the surface years before the cars have given anything like an average service.

This respectfully submitted for your consideration,

A. J. Bishop,

Foreman Painter, Northern Pacific Railway.

St. Paul, Minn.

PRESIDENT LANFERSIEK: The third and last paper on this subject is by Mr. John Stock, of the Maine Central R. R., Waterville, Me.

MR. STOCK'S PAPER.

"ARE YOU BURNING OFF YOUR PASSENGER EQUIPMENT BEFORE IT IS NECESSARY?"

Mr. President and Members of the Master Car and Locomotive Painters' Association:

When I received the notification that I had been appointed to write a paper on this subject I thought some one was playing a joke on me. "Are You Burning Off Your Passenger Equipment Before It Is Necessary?" Well, I should say not.

We, on the Maine Central, have a lot of cars that need burning off right away, and this is no joke.

When a car has been in service for twenty years and over and never received any such treatment, do you wonder the paint and varnish is falling off in large patches? I think burning off is the only remedy.

On the other hand, I have burnt off a few of our best cars, where the varnish was badly cracked, yet the priming was in good condition. Now, had I known of some successful method of treating these cracks I might have prolonged the operation of burning off for a few years. But I had to apply the torch, knowing no other alternative to give them a respectable appearance.

I hope Mr. Leach will enlighten me how to treat a cracked car, whose priming is still in good condition, so it may give a few more years of service before burning off, for at present I am "up against it" good and hard and know of no other practical way to do it than I have been instructed to do. If there is some successful method and material for painting an old cracked car and make a good lasting job of it without burning it off, then we want to know it, and know it right off, but at present I cannot help my skepticism on the subject, which is derived from my own observation and hearing the experience of older men.

Still, I suppose it is not too late to discover an elixir of life, so that even bald heads may grow a luxuriant crop of hair that is not even grey. This is what I am longing for, and hoping some one will produce. As yet, I am in a waiting attitude for not only this but many other things, a way to successfully paint an old cracked car being one of them. Therefore I have nothing farther to offer upon the subject.

Respectfully submitted,

John Stocks.

Waterville, Maine, Aug. 30, 1905.

PRESIDENT LANFERSIEK: Gentlemen, you have heard the papers read. They have fully covered the ground. You will notice this is merely a query, and I think we can close this subject by a vote of the Association. Each member can vote his sentiment and will save all discussion and quicken the business.

MR. MILLER: I move you that it is the sense of this convention that, as a matter of fact, we do not burn off our passenger cars as often as is necessary.

MR. COPP: I think before that motion is put, we had better have Mr. Leach's paper. It was Mr. Leach's paper that was the cause of this subject being presented, and I think the reading of his paper and showing the samples

promised to be exhibited would have a material bearing on voting on this subject.

MR. MILLER: I will withdraw my motion.

MR. BISHOP: I had a phone message from Mr. Leach yesterday before I left that he would not be here, and he asked me what he would do with the samples, and I told him to send them to the Hollenden Hotel.

PRESIDENT LANFERSIEK: The Secretary will read Mr. Leach's paper.

The Secretary read the paper as follows:

MR. LEACH'S PAPER.

Mr. President and Gentlemen of the Master Car and Locomotive Painters' Association of the United States and Canada:

In my letter of acceptance to read a paper before this association, entitled "A New Method of Treating an Old Cracked Car," I stated that I would furnish samples of siding taken from an old car showing the process of renovating as performed in the M. & St. L. shops. Unfortunately, I have not been able to obtain the desired and promised material, because of the heavy passenger traffic on our road, and regret exceedingly my inability to thus give you an ocular demonstration of how we treat a car that is filled with unsightly cracks.

A great many methods have been employed to obliterate the unsightly cracks on passenger equipment, but without lasting results. I do not think it proper, at this time, to attempt to tell you the cause of the cracking of paint and varnish on passenger cars, or what has been done to remedy the evil, but will deal only with what I consider the best method of remedying these defects without burning off the car.

After experimenting with all sorts of methods for a number of years—after attempting to fill up the old paint and varnish cracks, and after rubbing down the car with sandstone, which is a tedious and expensive operation, and only a partial success, it occurred to me that by removing some of the paint and varnish and preserving the original foundation as much as possible, the existing evil might be remedied, and if the work is properly done, it is my belief that the repainted car will give longer and better service than when originally painted. With this end in view, I commenced experimenting with "Varnish Remover." The "Remover" is applied with a three inch camel's hair brush, and the varnish kept moist by constant application until it, the "Remover," takes hold of the varnished surface equally all over, or, in other words, until the "Remover" gets in its work. After the varnish loosens up and gets rough, it will hold the "Remover" until it has expended its cutting powers. The dissolved varnish and paint may then be removed with the aid of a putty knife, using care to clean out the beads at each application, as the mush in the beads holds the "Remover" longer than does a flat surface, and if the beads are not cleaned out after each application of the "Remover," the varnish and paint will come off down to the wood. This you want to and can prevent. At the same time, care must be exercised against mutilation of the surface with the knife.

After the first layer of varnish and paint has been removed,

you will be able to judge how many applications like the one just described will be necessary to accomplish the desired result. You may have to make three or four applications; this, of course, will depend upon your own judgment and the condition of the car as regards depth of cracks.

After the desired amount of paint and varnish has been removed, allow the car to dry until the following day, then smooth the surface up with rubbing stone and water. The car is then ready for one coat thin flat lead, put on with a camel's hair brush. After this is dry, sandpaper and putty up all imperfections, and the car is ready for the body color.

My experiments along these lines have convinced me that a primer, no matter whether used on wood or iron, should have in its composition some kind of a mineral base.

After a personal experience with both, I recommend the liquid as better than the paste "Remover," because the liquid permits of ready observation at any and all times of its working powers, which the paste "Remover" does not permit of.

I would advise every master painter who adopts this method to familiarize himself thoroughly with the process, that he may the more intelligently instruct the cheap labor to do this class of work. And, en passant, I beg to be excused if I suggest that no amount of argument in favor of or against this, or any other similar procedure, ever did, or ever can, settle the question of its practical value. Only practical test demonstrations upon well known aged and decrepit, cracked and other defaced passenger equipment, can or will prove the value of this or of any similar renovating process. Yours truly,

W. F. Leach, M. C. & L. P.

Minneapolis, Minn., September 9th, 1905.

PRESIDENT LANFERSIEK: The paper is now before you for discussion.

MR. BUTTS: I cannot withstand the temptation to say a word or two regarding the paper. A number of years ago I went thoroughly into this subject of trying to remove varnish and retain the old foundation, and the beginning I would say was made upon a car that had a good foundation with the exception of the varnish being worn considerably and I made a success of it, but I soon got hold of a car that was filled with surfacer cracks, where the surfacer had cracked. These cracks go clear down to the priming, and here is where 80 per cent at least of our troubles comes. We have to deal with cracks that are made by a brittle surfaces. Now, I would like to ask any man in this room where he is going to stop when he uses a varnish remover, to save his foundation if he takes off the cracks? If you had nothing but the surfacer crack in the surface coat of varnish to deal with you could carry out a process of that kind with some success. But that is where our trouble lies and another trouble you would find is that if you will attempt to remove the surface painting of a coach one board perhaps will have more surfacer on it than another, but your varnish remover is spread alike over all, and perhaps the car is an old car that has been patched up frequently, and in some instances the boards are covered with the old original surfacer very thick and heavy, and on other parts light, and when you start to take it off,

the little openings beforehand, instead of putting them up afterwards. Usually there are not many places around a car to be found where water and ammonia could find entrance. So that while I am not an advocate of the ammonia method particularly, I think the objection which Mr. Butts speaks of could be obviated by just putting up all the cracks and places where the ammonia could find entrance.

MR. BISHOP: It does not appear to me that the use of ammonia as mentioned at this time in connection with removing varnish from the outside surface of the car has anything to do with removing the cracks in the foundation coat of a car that has got to be burned off. There are probably fifty different methods of removing varnish from the outside of a car, but that does not obliterate the cracks in the foundation. It is not necessary to use ammonia; you can use lye if you will use it as carefully, and it is my opinion,—and I think it is the opinion of all the members of this association,—that when a car is in a condition to be burned off, there is nothing that will remove the cracks so that they will be obliterated. You will also admit that a crack that has penetrated through the foundation to the wood leaves a photographic impression in the wood that will again show up in the finished surface. Even after the car has been burned off and sand-papered, and the cracks made so that they cannot be seen when the car leaves the shop, after they have been in the sun for a short time, the crack, although filled, will again show up. While we have methods of filling the cracks and do fill them, and get service out of our cars, my opinion is that removing the varnish with ammonia does not fill or obliterate the cracks.

MR. MILLER: I think Mr. Bishop's remarks are right to the point, and I will make a motion that it is the sense of this meeting that we are not burning off cars before it is necessary.

The motion was seconded and carried.

PRESIDENT LANFERSIEK: I want to take this opportunity of appointing several committees.

Committee on Resolutions: J. D. Wright, chairman, B. & O. R. R.; Eugene Laing, Northern Central R. R.; J. J. Sheerin, P. R. R.

Committee on Next Place of Meeting: D. A. Little, P. R. R.; T. J. Rodabaugh, P. Ft. W. & Chicago; J. H. Pitard, Mobile & Ohio R. R.

MR. PITARD: I move we adjourn until tomorrow morning at the usual time.

Seconded and carried.

And the convention adjourned until 9 a. m. Thursday, September 14, 1905.

THIRD DAY.

Thursday, September 14, 1905.

The convention was called to order by President Lanfersiek at 9:10 o'clock a. m.

PRESIDENT LANFERSIEK: The first business for this morning is subject No. 5,—“Preservation of Steel Cars from



A. P. DANE, SECRETARY AND TREASURER.

Decay. What New Developments has the Past Year Brought Out?" The first paper is by Mr. T. J. Rodabaugh, of the Pittsburgh, Ft. Wayne & Chicago Ry., Ft. Wayne, Ind.

The secretary read the paper as follows:

MR. RODABAUGH'S PAPER.

Ft. Wayne, Ind., Sept., 1905.

To the Officers and Members of the Master Car and Locomotive Association.

Subject:

THE PRESERVATION OF STEEL CARS FROM DECAY.

Gentlemen:—What progress have we made in the past year in the painting of steel cars?

I do not think we have made any. I attribute this to the limited privileges that the foreman has in making practical tests. As far as I am personally concerned I wouldn't give a test any consideration without it was a practical test. If a foreman knows anything he ought to know enough to paint a steel car. He, being a practical man, ought to know how to mix his colors, and what liquids to use in mixing them, and what, in his judgment, would stand the greatest amount of heat without blistering, and when he has his colors so mixed by testing them, giving it then a practical test on one of the company's cars that he represents.

But will the company give him a car for the purpose of testing his formula or mixture? In the majority of cases, no! I think if the company would give his foreman the same privileges, and show his foreman the same courtesies, give him the encouragement he should have in experimenting that they would give to paints that are sent from the manufacturers for trial, that it would be of more real benefit to the company.

Tests that are made by painting plates of steel and nailing them on the sides of a shop, and putting them on roofs for the purpose of testing to see which is the best material, I do not consider them of much value because they are not practical tests. They are not exposed to the different climates, and to the same conditions that a car is when running on the road.

I do not think that the problem of painting a steel car will be solved until the management stops the practice of loading hot slag, and taking sledge-hammers and pounding the outside of a car to loosen the coal and slag that has frozen in them during the winter. I think that if we had steel box cars to paint that we could solve the problem much quicker.

I do not know of any manufactured paint now on the market in my opinion that will stand fire.

The best paint, I believe, for first coating, a formula composed of red lead, adding 25 per cent white lead mixed with raw linseed oil; the oil should be boiled not longer than five minutes. This will enable you to skim off all the dirt and grease that will rise to the top. Do not use dryer of any kind.

In preparing the car to receive the first coat when built, we should be very careful that all the oil and grease is wiped

off clean with turpentine which has been left on by the riveters.

The thin scales should all be removed with scraper, wire brush, emery, or sand blast, or anything that will remove the scale.

If a car is treated in this manner I think it possible to make it stand, barring fire.

The first coat should have ample time to dry before the other colors are applied.

I would suggest that if an old car is to be repainted all the loose scales or rusted parts should be thoroughly removed, and the above mixture could be used on these parts.

In the early seventies I painted two steel coaches which I think were built by Barney & Smith, of Dayton, Ohio. (You can see that the steel car is not altogether of recent date.) I used the above formula. I kept touch of those cars for about six years and the foundation was good at the end of that time.

Very truly yours,

T. J. Radabaugh.

PRESIDENT LANFERSIEK: The next paper will be by Mr. Quest, of the Pittsburg & Lake Erie R. R., McKee's Rocks, Pa.

Mr. Quest read his paper as follows:

MR. QUEST'S PAPER.

THE PRESERVATION OF STEEL CARS FROM DECAY.

Mr. President and Gentlemen:

"What new developments has the past year brought out?" is the question. In reply, we wish to assure the steel car painting world that we will not assume the responsibility of answering such a broad, compromising question from other than a strict individual standpoint, based wholly upon a practical up-to-date experience when in charge of re-painting steel cars in the interest of Company employing us.

To quickly get down to the grist of the subject, we will begin our task by briefly giving a summary of steel car paints tested, from beginning up to date; also as requested, of past fourteen months—from June 1st, 1904 to July 1905, leaving our critical hearers to judge as to whether or not we have developed anything new in our continuous grind, offering you, as we tell our story, some weird tales of steel car abuse; also of the many and varied kinds of paints used in our dutiful efforts toward helping solve the present and future problem of paint preserving the probable millions of steel burdened cars to come, which, according to the up-to-date expressions of expert and railway official sentiment, rates the steel car a qualified success, barring the yet unverified fear that the great wheeled tonnage carrier is probably doomed to be prematurely eaten up by the elements producing metal corrosion if some cheap acceptable method and material be not timely discovered as a preventative.

During the period between 1898 and 1905, the Pittsburg & Lake Erie Railroad Company has authorized practical tests made of some one hundred twenty odd special and regular so-styled steel car paints—30 per cent of which being, in our

judgement, total failures; 65 per cent, passably fair; 3 per cent, fairly good, but not up to official expectation, which, through matter of exaction, we are much afraid will never be realized upon so long as the great service abuse of the steel car is officially tolerated, such tremendous abuses, in our estimation, undoubtedly contributing over 75 per cent of both the metal surface and paint deterioration of the steel car which is fast becoming a matter of great concern to the railway official economist.

With a view of helping honest endeavor in producing a perfect steel car paint, the Pittsburgh & Lake Erie Railroad Company's experiences have been so numerous and varied that we shall not attempt recalling all, but we believe we are not exaggerating our position in claiming to have had a passing acquaintance with a large majority of the advanced steel car preservatives, and as the writer is still a very young man with a large bump of inquisitiveness, he expects to keep right along with his share of work in the interests of the Company and trade craft.

In looking over our records, we find that our material experience in test and regular painting of steel cars includes combinations of carbonates of lead, blue leads, red leads, pure earth pigments, iron and zinc oxides in combination with the inert materials too numerous to mention, all kinds and makes of carbon blacks, graphites, natural mineral and manufactured pitches, petroleum and other residuums, asphaltums from all countries, and last, but not least, coal tar in so many disguises as to puzzle a college of chemists, or a whole association of railway master painters in everlasting session to define.

The following is a partial list of paints under test in our fourteen months' experience:

A COAL TAR COMBINATION

June 1st, 1904:—Hopper coal car 13715 two coats of the paint—a coal tar combination, machined on. Inspected for condition, June 3d., 1905; coating found fairly elastic, but badly checked; scheduled for one more year's service with final inspection. Have no hopes of this tar paint becoming a winner, but as a matter of equity we will say that this coal tar product is making the best showing of any cheap coating previously handled by us for same purpose.

TEST OF THE CHROMIC ACID SYSTEM FOR NEUTRALIZING STEEL AND IRON CORROSION:

June 3d., 1904:— P. hopper coal car 10075—old paint entirely removed from three panels, exposed steel surface left unprotected until next day, when the night's slight accumulation of rust was neutralized by applying and scraping in a chromic acid solution, using a broad scraping knife for purpose.

The solution was furnished by the Detroit Steel Paint Company of Detroit, Michigan, inventors of the Detroit System, they claiming that the basis of the system is the chromic acid treatment through taking up all foreign corrosive matter on steel or iron surface, thereby forming a thin

coating of what is chemically termed a chromate of iron, which, under action of light and heat, turns black and hardens, making a metal protective noncorrosive coating similar to the oxidation produced on aluminum, copper, brass and other metals through exposure to the elements. After chromic acid treatment, the panels and car were painted two coats of a carbon proofcoating, but as paint on this car was totally destroyed by fire and sent to shop in March, 1905, we regret to say that we are unable to fairly judge efficiency of chromic acid process, other than to say that a close examination developed fact that, though so badly charred as to need re-painting, there was no indication of any under scale of rust on treated panels.

In connection with this reported test, we submit a small piece of sheet steel half surfaced with the acid and one coat painted with a mixture of graphite paint, which has been exposed to the weather for sixteen months, the only criticism of which we will make, being the fact that as chromic acid is soluble only in water in case of abrasion water, as you will observe by closely examining painted surface of panel, is permitted to work in between paint and metal, which in our judgment, would become a source of promoting an under rust much to be avoided in steel car painting. As the chromic acid system will not remove flash scale, and there have not yet been any provisions made for preventing the physical abuse of the steel car, we are of the opinion that our present found test results would hardly justify the time and expense of treating the re-painted steel car with the chromic acid system.

A COMPOSITION COMPANY'S QUICK DRYING SPECIAL STEEL CAR PAINT:

June 1st, 1904:— Two hopper coal cars 10509 and 10435, test painted with a phenomenally quick drying paint. 10509 was machine painted two coats of red mixture of specialty and re-stenciled within six hours of one day; 10435, two coats of dark metallic brown, and re-stenciled within a 10-hour day, the method and time of applying paint being according to personal instructions and supervision of Concern's representative. 10435 was inspected July 31st, 1905, and reported upon as being in a very unsatisfactory paint condition. 10509 was inspected August 7th, after fourteen months' service; also reported in bad condition, the old paint on surface being reduced to an almost powdered form, showing conclusively that the wearing protective paint of to-day must conform with that of the past, which if over-oxidized was not worth the time and cost of application.

AN ASPHALT STEEL CAR PAINT.

July 7th, 1904:—Hopper coal car 13706, test painted two coats with a very slow hardening asphalt combination. Car made a first class appearance when leaving yard—white lead markings showing no indications of an understain. Inspected August 18th, 1905—painted surface found to be so badly undercorroded from loose scale as to require re-painting, showing conclusively that the natural tars are about as

unreliable as coal tars where put to test in steel car painting.

A STANDARD CARBON PAINT:

April 27th, 1905:—Third consecutive yearly inspection for paint condition of hopper coal car 10382, test painted two coats of heavy bodied carbon black, applied December, 1901. Barring where service abused, the paint on this car was found still to be a very elastic preservative and as car has been in continuous general service almost four years, we judge reported fact should cause further investigation as to whether or not the slow drying inert oil suspending carbon pigments are not best for steel car painting.

A SPECIALTY STEEL CAR CARBON BLACK:

November 7th, 1904:—Hopper coal car 10551, test painted two coats of a high grade slow drying carbon black, painted with machine. Inspected August 21st, 1905. Where not service abused, the sample paint on this car was found to be wearing and looking first class and if not hammered or burnt up, we will predict years of preservative wear from this test sample of carbon black paint.

NATURAL CARBON BLACK PAINT:

June 4th, 1904:—Hopper coal car 13526, machine test painted two coats with a black paint guaranteed to prevent all forms of corrosion where applied. This sample of Black paint seemed to be granular, instead of flaky in its dry pigment form. In paint form the material worked a little pigment heavy, but made a good coated appearance. Although ordered to inspect this car we have not done so, on account of failure to catch car on home road, but we hope to be in position to hand in results of inspection of this claimed new thing in time for Association's 1906 Convention.

AN IRON CLAD PAINT:

August 1st, 1904:—Hopper coal cars 10686 and 10671, machine test painted two coats of a ready mixed iron oxide made-up paint. The pigment of this test paint was very fine and strong of color, made a good appearance, etc. 10671 was sighted in a moving train July 1905, but could not be closely inspected so hurriedly; paint seemed to be very hard and dry, which is an undesirable condition for a paint to become on a steel car at any time within a fair paint life limit.

A SUN PROOF PAINT:

April 5th, 1905:—Hopper coal car 13686, machine painted two coats of an iron oxide ready mixed paint; sample finely ground and made a fine coated appearance when finished. We also hope to be able to make an inspection report of this so-styled sun proof paint in time for 1906 convention.

A GUARANTEED FIRE RESISTING PAINT FOR STEEL CARS:

April 27, 1905:—Hopper coal car 10552, machine test painted two coats of the newest thing in way of a fire resisting paint. We are patiently awaiting to learn service results

of this paint, and would like to own a block of stock in Concern in event paint on this car goes through the fiery ordeal of a hot carload of mill slag or other hot stuff usually loaded on a steel car (because it is a steel bar) and come out point intact, as claimed it will do.

To be reported upon at expiration of one year's service.

A SPECIAL IRON OXIDE COMBINATION:

July 14th, 1905:—Hopper coal cars 10192 and 10670, test painted two coats with brush; hopper 13740, machine painted two coats first class specially ground and prepared iron oxide paint used, paint worked smooth and appears to indicate a preservative elasticity, which possibly may verify claims made for this exclusively special iron oxide combination, that, as a steel paint, it could not be excelled.

A CARBO ENAMEL PAINT SPECIALTY:

August 8th, 1905:—Hopper coal car 13552, machine painted one coat; on account of material solubility, a second coat could not be applied. The car made a fair appearance with exception that white lead stencil on markings turned to the usual dirty yellowish brown color, which is generally much criticised by people unfamiliar with the peculiarities of a coal tar paint.

This especially authorized test will be inspected and reported upon in due time.

A NEW STANDARD STEEL CAR PAINTING SYSTEM:

August 8th, 1905:—Hopper coal cars 10695 and 10686, test painted with a specialty system designed for steel structural buildings, steel cars, etc., consisting of a special primer followed by two body coats. The body coating was furnished in two colors, the 10695 being body coated with a finely ground red iron oxide and the 10686 with a heavy bodied carbon black. As authorized, all of this test was machined on.

This special steel car painting system is styled Flexite by promoters, which, to render up an account thereof at end of a fourteen months' service test, we have been officially enjoined so to do.

A SPECIAL STEEL CAR PAINTING SYSTEM:

August 8th, 1905:—Hopper cars 13689 and 13619, machine test painted with a material system. 13689 entire outside body, including end bottoms, draft rigging, etc., was sand-blast cleaned and a primary coat of red lead lute was applied; also two coats of body carbon black, twenty-four hours between coats. 13619 was ordinarily hand cleaned, red lead lute primed and carbon black painted two coats, which was done after this manner to prevent the idea of any unfair advantage being given this Concern over others, whose test sample paints have been applied on hand cleaned cars exclusively.

We trust that the promoters and champions of the red lead lute and carbon black system will realize on their greatest expectations in this, the most expensive steel car

painting test we have ever been concerned in, and, as a pronounced anti red lead man, we await the verdict of the elements, which must decide the question after a year's steel car service abuse, and to be finally judged by a committee of inspectors.

In conclusion we will state that last winter something over two hundred steel cars were body damaged at unloading points, several new cars had paint entirely destroyed, quite a number were badly paint damaged on end bottoms, also over gas and coke fires in order that frozen up loads might be run through discharge hoppers. There were also many of these cars dynamited for same cause and purpose having side and bottom sheets blown full of holes, some so badly damaged as to require sheet renewals.

Under such severe service condition, it cannot be reasonably expected that paint of any kind is going to survive, and consequently is cause of much adverse opinion as to policy of expending time and money painting the steel car for appearance sake, where such service abuse exists. The uncertainty in matter of interior deterioration has also become a live topic among car service people, the investigative thinking official having long since been aware of the fallacy of applying paint on steel car interiors, and also being aware of the fact that paint not chaffed off, is sure to be quickly eaten up with the strong sulphurated solution formed deposits, undoubtedly the source of heavy rust films found in great quantities adhering to plate of steel car interior.

To ascertain actual loss in tensile strength of a badly corroded steel plate, freed of all loose rust matter, would, we think, be a task for a chemist or expert mathematician, and as we do not belong to either class we are not going to even venture an opinion on the matter.

The idea of rough cleaning and crude oil spray coating the badly corroded interiors of several steel cars was recently officially carried into effect at the Pittsburgh & Lake Erie-McKees Rocks Shops. Three five year service cars were selected. The first car's interior was freed of all loose scale and rust, thick and thin, three hundred and sixty-four pounds of corroded matter by weight being removed therefrom—requiring fifty hours labor for operation. This was followed up with a liberal spray coating of crude ground oil, requiring $3\frac{1}{4}$ gallons of oil for purpose. The second car was freed of loose scale and dirt only and spray coated, requiring four gallons of oil and ten hours labor. The third car was simply swept out, with exception of lower assembled joints about hoppers, which were dug out fairly clean, the job requiring four and one-half gallons of oil and five hours labor. Please note that car interior receiving the least cleaning, required the most oil in saturating process. As these cars are to be inspected at the end of six months if possible, we hope results will be such as confirm advanced suggestion that a liberal drench of crude oil should have enough penetration to both prevent and arrest a large percentage of the corrosive trouble of the modern steel car, which seems to be strictly attending to the business of its creation by structurally hold-

ing together, paint or no paint, notwithstanding all predictions otherwise.

Respectfully submitted, etc.,

W. O. QUEST,

P. & L. E. R. R., McKees Rocks, Pa.

PRESIDENT LANFERSIEK: The third and last paper on this subject will be by Mr. J. H. Kahler, of the N. Y. C. & St. L. Ry., Chicago, Ill.

Mr. Kahler read his paper as follows:

MR. KAHLER'S PAPER.

Meadville, Pa., Aug. 11, 1905.—Subject No. 5. Preservation of Steel Cars from Decay. What New Developments Has the Last Year Brought Out.

Gentlemen: The care of freight equipment has passed from my jurisdiction, but will give you a short letter on this subject, based on past experience and present knowledge as regarding steel cars, their use and abuse, and how we can prolong their life.

This subject has grown to great proportions in the minds of railroad painters, until it resembles something of an octopus. In so thinking I believe we only borrow trouble. If our combined knowledge on preservative coatings for steel cars would prolong life indefinitely, we would be guilty of taking the bread out of the mouth of the steel trust. If a preservative coating will preserve a steel car a reasonable length of time, why that is all we should expect. We know the steel car must be painted oftener than the wooden car. If the metal car has parts of the painting burned off by hot slag, it does not follow that the car must be shopped (at least not in the mind of the railroad manager) as the car will still retain its load. But in the case of a wooden car, it would have to be shopped in order to patch up the burnt out holes or it would loose its load. In this respect the wooden car has the advantage of loafing around the shop where the painter can get a chance to remedy the evil, but in the case of the steel car, he has not the same chance unless he goes to the terminal yard or the place of loading, and doctors up the blemishes before rust sets in and does the mischief. It is folly to expect any coating to preserve metal thus treated, or rather mistreated. From this we are led to believe that the remedy lies largely in the care given, to prolong the life of the metal car. I also think the construction of these cars could be changed by strengthening those parts receiving the most wear, as around the interior offsets in openings of Hopper bottoms. Also the use of a non-corrosive felt or paper between all lap joints where in contact with sulphurous moisture.

As additional remedies against the decay of metal cars, I would add: Clean them off with sand blast to clean bright metal before painting, and use the proper paint properly applied for this purpose. Enforce rules governing the care and handling of metal cars.

The development most noticeable in the last year has been the more extended use of sand blast for cleaning the metal car previous to painting. Its use acts as an incentive to more

cars being painted which in many instances has been sadly neglected.

Respectfully submitted,

J. H. KAHLER.

MR. WYNN: I notice there is an absence of the American flag, and also the flag of Canada on our walls, and I move that the association purchase these banners and display them upon the walls of our convention hall.

The motion was seconded and carried.

PRESIDENT LAFENSIEK: Gentlemen, subject No. 5 is now open for discussion. We will be pleased to hear from any of the members. Has any member anything to offer in the matter of the preservation of steel cars after hearing the papers read? It seems that the papers have fully covered the subject, and as none of the members seem to want to discuss the matter, we will pass to the next.

MR. RUSSELL: I move that the papers on subject No. 5, with all the tests, be referred to the Committee on Tests, to be appointed by the incoming president.

The motion was seconded and carried.

PRESIDENT LANFERSIEK: The next is an essay, "The Car and Locomotive Painter of Today," by Mr. Chris. Clark, of the N. Y. C. & St. L. Ry., Chicago, Ill.

Mr. Clark here read the following essay:

THE CAR AND LOCOMOTIVE PAINTER OF TODAY.

The car and locomotive painter of today is a very different type of man than he of our early recollection. He is a product of the present progressive age, and bears about the same relation to the old time conservative painter that the twentieth century limited bears to the prairie schooner. Instead of being a man of one method, and that by the way the same method as pursued by his father and perhaps grandfather, he is now a man of varied methods, resourceful and versatile; capable of meeting any contingency that may arise, or conditions that are the outcome of modern requirements, and is ever ready to take the Athenians of old "to tell, or to hear some new thing." We no longer dwell within our own narrow sphere, with an all-absorbing desire to maintain the traditions of our trade, preserve its ancient formulas and withal turn out of shop a creation bedecked and begilded as though it were built for the sole purpose of exemplifying the painters art, regardless of time and expense. The painter of today has emerged from his exclusiveness and in response to modern progression finds it expedient, if not absolutely necessary to sacrifice art to artfulness, tradition to dollars, and formulas to utility.

As an integral part of a great business enterprise, he feels that he has an interest in every other part and is therefore desirous of conserving and forwarding the welfare of the whole. This may sometimes be accomplished by a lavish display of his art, but more often by a studious attention to methods of saving time and money.

This is not an age of sentiment, but eminently one of facts and figures. The old foggy style of doing work, while pleasing to the painters eye, is most unsatisfactory to those who have to foot the bills. The principal item today is to get the work out of the shop. The painter is necessarily the last man

on every job and, therefore, blame on account of delay arising from whatever cause is more or less reflected upon him. The fact that he may not commence upon a coach until the carpenters have prepared the surface is liable to be overlooked, and the date set for an engine to go into service is based upon the time required by boilermakers and machinists—theirs being considered the more essential part of the work and very little allowance is made for time required by the painters afterward.

Some are fortunate in having better shop facilities than others, and I fear this is not always fully considered by our superior officers, in comparing results attained by those less favored.

All these things are against us, but still they but call for the exercise of those qualities which must be at the command of every successful man in the mechanical field of labor.

Other qualifications than that of a mere painter are requisite in a foreman. Results obtainable under certain existing conditions are largely determined by the executive ability of the man in charge. It is this quality which enables him to use the help and facilities at hand to the best possible advantage, and to overcome the various obstacles, and at times vexatious problems incidental to the business.

The matter of dealing with help is an important one. To avoid friction, and at the same time secure the maximum of productiveness from each man requires discipline, firmness and tact.

We all know the force of example, which is said to be better than precept and that our own conduct is reflected in a very marked degree in those under our charge. Only he who is himself amenable to discipline can enforce discipline, and only he who is circumspect in his own conduct can consistently require a close attention to duty in others, or inspire their respect and confidence.

The foreman of a well regulated shop should foster a certain esprit de corps for the purpose of stimulating the efforts of all in a common interest.

Malcontents and chronic kickers must be discouraged and only such men be promoted or retained, intelligent enough to recognize that their interests and those of the company are identical. We probably all have noted that one disadvantage in the present progressive industrial age, lies in the fact that men are not as a rule so loyal or reliable as formerly, but on the other hand are more or less independent and indifferent. This I attribute in a measure to the absence in many shops of an apprentice system, and it presents a problem which must be wrought out in the near future.

I am of opinion that no foreman of any other department of a railroad shop is subject to a like amount of irritation, on account of damage to finished work. Each is intent upon completing his own work as quickly as possible; heedless of wet varnish, and the fact that it can be easily marred or that it has a strong affinity for dust, and with a serene confidence that it can be touched up.

The present time limit for shopped cars requires that the various trades work concurrently as far as practicable. There-

fore, we must repair the damage as uncomplainingly as possible, and cultivate the faculty of modifying our adjectives.

It is of the utmost importance that the painter strive to maintain the most cordial relations with every other foreman on the ground. We all know that disputations as to precedence and jurisdiction, or the exhibition of petty jealousies are not only undignified and detrimental to the service, but also exert a baneful influence on the men.

The car and locomotive painter of today must possess the same qualifications and characteristics as the successful business man. Having to deal with all sorts and conditions of men, he must be not only "all things to all men," but the right thing to the right man.

Business acumen and sterling integrity, with a liberal endowment of the cardinal virtues are assets as valuable today as ever. These are either the result of early training or are inherent in the man; only what may be termed the non-essentials can be acquired in later years.

Equipped with energy and perseverance, with an eye single to the welfare of the company that honors him with its confidence, he will rise superior to the vexations and discouraging incidents that are common to all.

CHRIST. CLARKE,

N. Y. C. & St. L.

MR. CLARK: Gentlemen, I have to make an apology in this way: The subject of that essay was to me a very difficult one to deal with, without being personal or attempting to moralize, and I hope you will acquit me of any desire to do either.

MR. BUTTS: I think we have all enjoyed this very excellent paper by Mr. Clark, and I would move you that a vote of thanks be tendered to Mr. Clark for presenting it, and that it be incorporated in our records.

The motion was seconded and carried.

PRESIDENT LANFERSIEK: We will now pass to subject No. 7,—“Economy and durability considered, to what extent may enamels or varnish colors be employed as a finish for car and locomotive equipment, exterior and interior?” The first paper is by Mr. C. E. Copp, of the Boston & Maine R. R., Lawrence, Mass.

Mr. Copp read the following paper:

MR. COPP'S PAPER.

Subject No. 7: Economy and Durability Considered, to What Extent May Enamels, or Varnish-Colors Be Employed as a Finish for Car and Locomotive Equipment?

Mr. President and Fellow Members: Proposing this subject myself as a member of the advisory committee, and accepting an appointment to write a paper, I am not going to dogmatize upon it, but am in the field more for information than to impart the same. I do not know how it may be with you. I hope you have shop-room and opportunity to do all you wish to your cars, but down our way when winter is over and the birds begin to sing your people flock to our beaches and mountains in such numbers—and we like to have them with us, God bless 'em—and linger so long in the autumn, to say

Not wishing to be too lengthy I leave these thoughts for your consideration and discussion. If you have any reasonable objections let us have them. Do not spare me, nor my feelings. I have no glass house to protect. Respectfully submitted.

CHARLES E. COPP.

General Foreman Painter, B. & M. Car Department.

PRESIDENT LANFERSIEK: The next paper is by Mr. E. T. Congdon, of the Northern Pacific Ry., South Tacoma, Wash. Mr. Congdon read the following paper:

MR. CONGDON'S PAPER.

South Tacoma, Wash., August 11, 1905.—Subject No. 7.—Economy and Durability Considered, to What Extent May Enamels or Varnish-Color Be Employed as a Finish for Car and Locomotive Equipment on Exterior and Interior?

Mr. President and Gentlemen: By way of introduction, you will pardon me if I digress a little from the main subject.

First: As to what extent enamels may be employed, depends the elimination of all decoration. With some, this suggestion may be met with strong opposition. Any change which is progressive has always met with opposition, and the few thoughts I have on this subject, I trust, may lead to a thorough discussion of its merits or demerits.

Changes of style and method are continually going on in this world and we honestly believe that the world is advancing in art, science and in all things that pertain to a higher civilization. Could our fore-fathers be permitted to live for a short time in this, the twentieth century, and note the changes, they would be lost in amazement. They would see in place of the old fashioned stage coach, the modern railway vestibule trains, containing the luxurious drawing room, sleeping and dining cars, comfortable and cozy cars gliding through the country with no visible indications of the power that propels them; magnificent palaces that cross the great oceans; the splendor of our cities illuminated with electricity, and more wonderful still, sit in their drawing room and hear the music of some noted band.

These are some of the modern wonders, and we expect that changes will be going on until the Millennial Day comes.

Why not the painters and foremen painters change? I believe the railway painter has been and is always as ready and willing to adopt new methods and keep up with the requirements of modern times as any other department in the railway shops. For a moment let us turn our minds backward: The first passenger train I ever saw was on the old Erie at Corning, New York. The engine was elaborately decorated, tank covered with scrolls, drivers painted vermilion and striped with gold, jacket bands, dome casings, steam chests and many other parts, brass highly polished. The exterior of cars gorgeously striped and ornamented. The interior was in keeping with the exterior, oil paintings of the far west, Indians and buffalo on the wild prairies.

In the '60's it was carried to a still greater extent when Pullman sleepers and drawing room cars were first introduced. In large medallions in the center of cars were painted portraits of the officers of the road: James Fisk, Jay Gould and

others. They were elaborately decorated with gold, and when fresh from the shops they were beautiful to look upon. In the '70's Japanese ornamentation was displayed on both exterior and interior. This did not last long and as time has passed, decoration has gradually disappeared until today on some roads only name and number appear. The question may be asked: Is this change good taste, good judgment and economy. I certainly believe it is.

Our modern railway managers believe they can spend their money to a better advantage than to employ artists to display their skill and art on the exterior of passenger cars and engines which are exposed to the elements; heat, cold, rain, dust, smoke and gas in tunnels. Should one-half the money expended on decoration be appropriated to the cleaning and sanitary condition of cars, we would have far better looking trains on some roads. Assuming then that it is the proper thing to do to abandon all ornaments and stripes, then we only have the letters and numbers to contend with. These could be made of aluminum or of some other metal. They could be enameled and so arranged that they could be removed and replaced at a very small cost, and following the method of one of our leading car manufacturers, by adopting the same color for exterior of sash as the body of car, then we have a clear swing for the enamel finish. Elevation, body, sash, trucks, platforms and irons. Two good coats of enamel should be sufficient for a newly painted car, allowing the car has a good foundation. At the end of eight months shop the car, clean thoroughly in and out, give one good coat of enamel on exterior, have trucks inspected and repaired, and floors painted and car is in good condition for another eight months. At the end of sixteen months car should have general repairs, interior repaired and re-varnished if needed, and give exterior one good coat of enamel. Following this method, at the end of five years car would have less number of coats than with the clear varnish method.

The cleaning of the exterior, while car is in service, should be done with oxalic acid and clear water. In adopting this system, cars would be kept bright and clean and in a more sanitary condition, and I believe this would do away with all emulsion cleaners and knock out the copper sheathed cars, and effect a great saving in maintenance of railway equipment. On the interior of coaches enamels cannot be used to any great extent except seat arms, heater pipes and floors. Baggage, mail and express cars; the whole of interior can be finished with enamel. We have been using such a paint for several years, and find it economy both in labor and durability as many of our cars when shopped needed only a thorough cleaning and perhaps a little touching up, and then are good for another sixteen months.

Locomotives: As we only put number on tank and dome and initial of road on cab, we use this enamel process altogether with very few exceptions, applying two coats of enamel, stencil letters and number one coat with white lead, second coat run them over with pencil, using white enamel. This method has proven to be economical and durable.

Some have made objection to enamels as being more difficult to apply. The old method of finishing cars years ago;

after car had been surfaced a coat of flat color was applied and then a free coat of color and varnish or enamel. Painters at that time had no difficulty in applying it. A good varnisher will readily adapt himself to its use. Another objection has been made: That in washing the enamels with soap the alkali removes the color. This can be remedied by using oxalic acid, which is far neater than alkalies and does not attack the enamel, but simply removes the dirt.

Having considered to what extent enamels may be used, the next question is as to its durability. In the wear of enamels we will admit it will not hold its gloss as long as the clear varnish, but it will stand washing and wear longer. If it is true, and I think you will all admit that it is, that oil mixed with a good pigment will wear longer than the clear oil, is it not true that a good varnish mixed with pigments will wear longer than the clear varnish? The base of varnish being gum it is not of a nature to resist the wear it is subjected to as it would if a mineral base was added to it. The light colors that will admit a good proportion of lead are more durable; yet the Pullman color contains colors that are durable. We all know that three coats of good oil paint will protect a building at least five or six years. Now, if we have a paint or enamel where a varnish takes the place of oil, we have a paint that gives protection and at the same time gives us the enamel finish, which, if washed with the proper material, will be kept clean with as little labor as if the clear varnish was used, and give longer service.

Several years ago I made some experiments with enamels which were satisfactory as to durability, but our standard ornamentation at that time made it impracticable. A great deal depends on the manufacture of enamels as to their durability. Many of the pigments acting as a dryer, a reasonably oily varnish should be used and the pigments thoroughly incorporated. In my opinion such an enamel will maintain a higher standard of durability than the clear varnish.

Our paint and varnish manufacturers have kept pace with the requirements of the painter and many changes have been made, they having employed skilled and practical men who have worked in harmony with the painter to produce the very best, and if our railroads demand enamels, the alert varnish maker will produce an article that will fill the bill.

As to economy: It takes first, less material; second, less labor; third, less time in shops, and fourth, it gives greater durability, and as a result cleaner and better looking trains.

I trust that I have thrown out some points that will lead to a thorough discussion of the subject, pro and con. It is a subject that is not new, but has been in the minds of some of our master car builders for years, and now it is up to the master painter to decide if it is practical, economical and durable.

In advocating the painting of railway equipment, plain and without ornamentation, no doubt but there will be some criticism from the ornamental painters' standpoint, but as one of our master painters has said: "If I owned a road all by myself, I believe I should adopt the enamel method and abandon all ornamentation."

There is a large field for the artist and ornamental painter, and more demands for the fresco painter than there ever was in this country before, and no machine has yet been invented to deprive him of his art.

It has been my privilege to ride over a road that has abandoned stripes and ornamentation and to hear some of the favorable criticisms from its patrons admiring the trains.

Respectfully, E. T. OONGDON,

Foreman Painter Northern Pacific Ry., So. Tacoma, Wash.

PRESIDENT LANFERSIEK: The next and last paper on this subject is by Mr. E. J. Arlein, of the C. & N. W. Ry., Chicago, Ill.

The paper was read by the secretary as follows:

MR. ARLEIN'S PAPER.

Chicago, July 31, 1905.—Mr. Robert McKeon, Secy. M. C. & L. P. Ass'n., Kent, Ohio.

Dear Sir: In answer to the request of your committee for a paper on Rule 7, I will say that in my opinion the enameling of cars on the outside is not a success. We have tested enamel paint on a number of our cars, coaches and baggage cars with the result that these cars came back in a few months in such bad condition that it was necessary to burn them off, and we therefore went back to the old system of color and varnish.

When newly painted, the enameled cars looked fully as well as the varnished cars, but after being on the road a few trips the gasses, soot and smoke with which they came in contact made them look very bad. The worst of our troubles, however, came when we tried to clean them. I suppose that every painter here knows that there is very little on enamel cars to clean, because the minute you cut through the outer enamel, you reach the color or pigment; our color being chrome yellow, we found it impossible to keep the cars looking clean.

On locomotives we use nothing but enamel black and find that we have just as good results as if we used color and varnish.

We are also using enamel on the inside of the toilet rooms in our smokers. They are sheathed with a 2 inch Whitewood and receive a primer and three coats Baking enamel, using gasoline torches to do the baking. They look very well and are also easy to keep in a sanitary condition.

We also enamel all ice boxes in dining, buffet and private cars, using three coats of Baking enamel and baking each coat about five hours with a gasoline torch, which enclosed give 135 degrees Fahrenheit; we have been doing this for the past twenty months and find the cars coming back in a very good condition. This, I believe, is one of the best improvements in the use of enamel that we have made as it gives the men employed in the dining car service notice when their ice boxes need cleaning, as any dirt shows plainly in the darkest corners.

I am not in favor of using enamel for interior decorations except on old canvass ceilings. The woods used on interior of all passenger carrying cars are generally very expensive

woods, and rich in nature's own coloring; they cannot be improved in beauty of color or finish by any channel, nor can the expense of maintenance be lessened, and considering the work required to keep them in repair, as it is next to impossible to touch up the scratches and bruises on enamel, as you can in natural wood, I do not believe it desirable.

Thanking you for your kind attention, I am, yours truly,

E. J. ARLEIN, C. & N. W. Ry.

PRESIDENT LANFERSIEK: Gentlemen, you have heard all the papers on this subject. It is now open for discussion, and we will be pleased to hear from any of the members.

MR. BUTTS: I feel that this is a subject we are all deeply interested in. I consider it the most important, with one exception possibly, of those we have had before us. I want to say to start with that I am heartily in accord with many of the things recommended by both Mr. Copp and Mr. Congdon; others I am just as decidedly opposed to. I am in favor of plain ornamentation of a car. I think we are coming to that rapidly. I do not think we need do anything to hasten it. It is here with us almost now, and shortly the ornamentations on the exterior of a car I believe will be done away with, and I shall certainly welcome it. I believe it is a waste of money to attempt to decorate the surface of the car. I would take the money that is spent in ornamentation and use it in putting a solid, smooth foundation on the car. There is one thing that we cannot do away with,—which is one of the greatest problems we have to face today in keeping our cars in a presentable condition,—and that is cleanliness. It is necessary to keep a car clean, and in order to keep it clean we need a smooth, solid, firm foundation to work upon. Otherwise, it is absolutely impossible to keep it clean. Mr. Congdon says that by enameling a car he can keep it in good condition for eight months. If I should propose to the road I represent today a process that would bring their cars into the shop once in eight months, I would recommend the first year an expenditure of about half a million dollars, and I do not think it would carry if I should recommend it. I would certainly recommend that we extend the days of shopping the cars to at least fifteen months, and I am of the firm opinion that it can be practically done on a large part of the equipment to eighteen and twenty months. A car that has received a thorough painting, and is in a smooth condition, can be cleaned not with acid, but with an oil cleaner which will preserve the varnish you have got there, and be kept in good fair condition for from twenty to twenty-two months. This means a great deal to a railroad company that has got a large equipment. The expense of shopping the cars is something that interests the managers of railroads at this present time, and there is no need of shopping a car if it is properly taken care of. This I have been able to demonstrate, having had an opportunity to do so. I want to say that a few years ago I was an advocate of acid for cleaning cars. It seemed to be the best thing you could get that was soluble in water to remove the dirt from the outside of a car. I thoroughly believed myself that it would not attack the varnish, but I was compelled to change my mind. I now say without fear of successful contradiction that any substance soluble in water

will attack the gum and oils that the varnish is composed of. The varnish will absorb the water itself after it has been on the surface of a car for eight months. Any acid that you could possibly use on the exterior of a car will attack the color whenever it comes in contact with it, and turn it whitish looking. If you mix a body color with the varnish, and the body color is a bright color, the moment the film of the varnish is broken it begins to absorb the acid and water and you are going to have a muddled appearance. It also will destroy your varnish after it begins to absorb the water. That is the reason I have abandoned acids. Wherever the film is broken, the acid gets under the varnish and attacks the color, and you have got something that will ruin the appearance of your car. A great many advocate cleaning cars with water solutions because of their cheapness. I have had to deal with this subject constantly for nearly seven years. Some of the divisions of our system—the Vanderbilt system—have held to acid cleaning for a considerable length of time. We have had many tests made and figures compiled to show the expense, and there is very little difference in the expense of cleaning a car with an oil cleaner as compared with an acid cleaner. After deducting the expense of cleaning a car with an acid cleaner, the difference between the two is very little. If you could extend the days of the car not more than one month, you would gain more than the difference in the expense between an acid and oil cleaner, that you can at five or six months. The expense of cleaning with an oil cleaner on the exterior of a car is so small that it is scarcely worth mentioning. (Applause.)

MR. GINTHER: Our road has been using enamels for a number of years, gradually a little more each year. We began by using deck finish for our decks, with good results, and we are using it now. Following that we took up the truck and platform color in the form of enamel, doing away with striping and using it on the interior, the heater pipes, the iron and interior of the baggage and mail cars, the mail cars, however, only on the deck. Recently we have discarded the use of varnish on our locomotives; we are using enamels on the latter parts, the cab and tender. It is pretty hard for me to accept that, but as a matter of economy we are going to give it a trial. The hardest trouble I ran up against was using aluminum letter on the enamel, or varnish black, as it might be termed. We coat the tank perhaps in the morning and by evening, or possibly the next morning, we leave it for drying and then apply the aluminum. You know what that means—the aluminum is sticky and causing trouble. I tried to talk them into using the gold color, and possibly I will finally succeed in having them adopt that, but since aluminum has been our standard color for a number of years, they prefer aluminum. So far we are giving it to them with a great deal of trouble in handling. The latest thing, however, is an order to use enamel on the exterior of our suburban cars. With what results I am going to meet, I do not know. We have not as yet painted any of them, but as soon as they are shopped, we expect to begin.

In connection with that, I would say, we have discarded all exterior decorations, using nothing but the word "Wabash"

on the letter board and the number in two places on each side, and we have also discarded the words "Chair Car," or "Parlor Car," "Dining Car," etc. leaving all lettering off except the letter board and the engine board. I wonder what our experience would be in cleaning cars done on the outside with enamel. A few years ago we coated two cars and I found after shipping them, that the enamel had worn rough, porous, and of course such a condition will naturally take on the dirt. The oftener you scrape that kind of a car, the more trouble you are going to meet with. I thought possibly we could use a higher gloss enamel than I used on those cars, and meet with better results than we met with in those cases.

I would like to ask the gentlemen who are using enamel, or who have been using it, for a number of years, how they build up their surface ready to receive the enamel?

MR. MILLER: I was just going to raise my voice in objection to one or two points contained in Mr. Congdon's very able paper. I can hardly agree with him when he says he is able to produce an equally good appearing surface on the exterior of a car, or any other surface, by the use of enamels. I have never been able to do it. You can closely approach it by sacrificing covering qualities or the opacity of the goods by the introduction of a large amount of varnish. You can closely approach the clear varnish finish, although not quite. I also agree thoroughly with what Mr. Butts has just stated about the inadvisability of using an enamel finish on account of the readiness with which the color is attacked during the cleaning process. It is simply a matter of the appearance desired. The subject is an old one. There is not a painter in this room but who, at one time or another, has used enamel finishes on either the exterior or interior of a car. The subject is as old as the trade. Enamels are simply varnished colors, colors to which varnish has been added to give the desired gloss. Now, some people are satisfied with a mediocre appearance only as to gloss and surface. If that satisfies them the enamel will do. You will get as equally good results from the standpoint of wear in some cases, especially where the material used is of a good nature, but roads requiring well finished surface, people who insist upon a good high gloss to the work, and keeping everything about the car of a high standard, will hardly be satisfied with the enamel system.

I cannot agree with Mr. Congdon in advocating the use of oxalic acid on the exterior of cars, or any where else, for cleaning purposes. I have used it myself extensively and I have found while the surface is new, and while the varnish or enamel has its initial gloss, the water-resisting properties of the material are not attacked, but once disintegration has begun to take place, say after five, six or eight months' wear, it is attacked quite readily and the surface turns white. As I said I used this material for a long time in cleaning cars, and we had to abandon it. It is not the thing to use. I prefer an oil cleaner, or even soap and water, to acid—in fact, acid of any kind.

MR. PITARD: Possibly I may be considered pessimistic. I always try to be optimistic about everything connected with the painter's art, but I must say that I am unqualifiedly opposed to varnish color or the enamel method of cleaning

car for several reasons. It is possible, no doubt, in some instances to do a job with the enamel method cheaper than you could with cleaning the varnish, but I believe that it is generally conceded that that method is inferior to the paint and varnish method by which we are doing our cars today. I think men ought to be governed by circumstances. There are instances where a man can effect a saving for his company by their use, but I think he ought to allow himself to be governed by circumstances in the use of it, instead of adopting it generally, for the reason that if the varnish color or enamel color method is once begun on baggage and express cars, who can say how long it will be before it will be extended to the coaches and all classes of passenger equipment.

Now, the thought of using that enamel on cars carries with it the abolition of all exterior ornamentation, because we know it is impracticable to give it a varnish color. If that method of painting should be extended to the coaches, which it probably would, the abolition would naturally follow, and in that case it would be, not progression, but retrogression, and retrogression once begun, who can say where it would end? How long would it be before we would be painting the exterior of the car equipment with freight car paint, applied with an eight inch brush? It took many years for the Master Car and Locomotive Painters' Association to arrive at the degree of proficiency at which they are today by their annual meetings and exchange of ideas. We claim we have reduced the cost of equipment painting, I believe, about fifty per cent. Now, I submit that instead of retrograding, should we not uphold our own trade instead of running it down? Should we not endeavor to maintain on our cars a reasonable amount of ornamentation for appearance sake? It is true that a car could run and make as much money without a stripe and all the elaborate ornamentation, but is that desirable? A man can walk down the street with a five-dollar suit of clothes on, and fare as well as another man with a fifty-dollar suit on. But we know that appearances count for a great deal in this world. So I maintain that it ought to be the endeavor of the Master Car and Locomotive Painters' Association to maintain their equipment up to a reasonable degree of durability and also of appearance.

MR. COPP: I submit that my friend Pitard is very gloomy. He is decidedly pessimistic. He says that the adoption of the enamel system will naturally bring the abolition of all decoration in its train. He is mistaken. The abolition of the decoration has already preceded it.

MR. PITARD: Not generally.

MR. COPP: Pretty extensively. The New York, New Haven and Hartford Road, which is second in size in the United States and Canada, has already abolished everything but the name of the road and the number. The Northern Pacific, I believe, is another, and there are others. I think the Boston and Maine will, whether the enamel system is inaugurated or not. I think the striping of cars is going to be abolished. It is simply a question whether you paint and varnish separately, or whether you put them on together. That is all. Now, replying to Mr. Ginther over there, who

asked for some information as to building up a surface before enameling, the same method is adopted right straight through, whether the car is varnished or not. The car is painted in the same way and varnished with enamel instead of varnish. Now, as to cleaning I believe there are members who have a great deal of a bugbear in that respect. I believe an enamel car, with the enamel properly applied, will clean with an emulsion cleaner just as well as a varnished car; in fact, I have had cars in use more than a year that have been brought in for cleaning and varnishing, and they have cleaned with soda and pumice stone just as thoroughly and practically as though they were varnished. You would never know the difference. There is no use in talking. It is thoroughly practical, and the painter might just as well get into the forefront of the matter and proceed with the age, as to be dragged along behind, like a cat, by the tail. We cannot maintain our artistic ideas of former days. I have had my hack at it with the rest. I know the trend of the age. I believe a different method of finishing the exterior of passenger equipment is coming. I would not be surprised if paint were abolished altogether, or varnish either. I think we are getting a tremendously wholesome compromise if we get a good enamel finish.

MR. PICKFORD: I cannot say much about the matter. We have done several cars lately. I do not know how they will wear. That is something we have got to find out later. It is something we have all got to come to, and we might as well start right in. I cannot say much about the subject, but I am certainly in favor of it. We have got to do something of that kind.

MR. KEIL: When I was with the Chicago & Alton, twelve or thirteen years ago, the road running into Chicago adopted the enamel system. They also had seven terminal cleanings of the Alton. I often visited their cars and watched them very closely; I found their trains in a very short time got very dirty. The foreman of the cleaning gang said it was almost impossible to clean those cars. He said: "We are shopping them twice a year since we have adopted the enamel system." I watched that system closely, and I believe that it was the poorest equipment running into Chicago. They have abolished the enamel system and I don't think they will ever take it up again.

MR. COPP: As a member of the Advisory Committee I proposed some man from that very road, so as to get information, but I do not think we have that road represented here at all. I do not know whether the secretary wrote them or not. There were certain men on that road appointed to treat on that question, but they are not here. I would like to ask Mr. Keil if the body color of that road was not yellow.

MR. KEIL: Yes sir.

MR. COPP: That makes all the difference in the world, gentlemen. You cannot make a suitable enamel, in my judgment, for the exterior of passenger equipment, while lead is the chief ingredient in it, because you cannot introduce enough varnish into it. Pullman enamel is the only thing I would consider or something of a similar nature, because you have got to have too much pigment, or you cannot get varnish

enough into it to produce a sufficient gloss. In Pullman enamel, of course, you have got a large amount of gum and varnish and a very small amount of pigment comparatively.

MR. KEIL: I would like to make the matter clearer. They also have more peeling inside of three years than they had in fifteen years before. Anybody knows that light yellow equipment is pretty hard to keep clean.

MR. COPP: The peeling was not caused by the enamel. I do not believe where enamel is used on a car which is thoroughly painted, that it will peel because enamel is adopted any quicker than with varnish.

MR. HOUSER: I would like to ask those who have had experience in the enamel system, if they do not find the enamel very much perished, so much so that when coated two years ago that it would be necessary to give it two coats. I would like also to ask while I am on the floor, Mr. Arlein to explain to us something in reference to his gasoline baking system.

MR. ARLEIN: We use regular gasoline torches in the closets which are closed tight, and then the torch is applied. We use a thermometer to get the proper heat, and at 140 with five hours' baking, the enamel becomes perfectly hard, almost as hard as porcelain.

MR. BISHOP: I do not know that I wish to say very much on this subject of enameling, but I want to say this: that glorious will be the time when two extremes meet on an intimate basis in common; and I have reference to my friend Mr. Congdon and myself, he being on one extreme, and I on the other. The question of enamel is an old one. I used enamel when I was a boy in various forms. I believe that enamel is the proper thing to use in the proper place. You are now desiring to find whether the proper place is on the outside of the body of the car. We know it is good on the deck, on the trucks, and on the platforms; we know it is good for the interior, and that there is nothing better for a locomotive. I say for locomotives, because they will take no care whatever from the time they leave the shops until they come in for repairs, and they are always painted whether they need it or not. It is not so with a car. You will secure a proper foundation on the car, which you will swear by for durability, and if you do that, it is necessary to put on material that will protect that foundation to the extreme limit. I do not believe that our people will agree to adopt a system of any kind whereby the cars should be shopped once in eight months. If we take a car in once in every eight months for the purpose of putting on an enamel coat, only one coat, those knowing the nature of enamel, insist on applying a somewhat heavier coat, in order to get sufficient body in one coat. We figure that a car in our line in the busy season is worth at least \$25 per day in service, and you cannot shop a car much short of five or six days. I claim I can color and varnish that car in an almost equal time for sixteen months' service.

MR. CONGDON: I am very glad to hear this subject discussed. That is what the papers were for. It only emphasizes the fact that good things come slow. Our friend Bishop said that we have the trucks and platforms and the iron, and it is not going to be a great while before we get the body. With regard to shopping a car every eight months, on our road

a car runs about two thousand miles in one run. Those cars get very dirty. They get very hard usage, and it is almost impossible to run the car twelve or fourteen months unless that car gets to the shop for something. I understand that in the summer time on the New York Central road part of their work is cleaning cars and going over them with emulsion. Now, a car has to come to the shop to be repaired. It will not run eight months without the trucks being repaired, or there is some part of the car that is going to be repaired, and that car should come in in the summer time, when you are doing that kind of work, and be thoroughly cleaned. There is always some work to do inside of a car, and you would have ample time to clean the car and give it one coat, and then it is in good, serviceable condition for eight months, with the regular cleaning it gets, at terminal. I do not claim that the roads are going to lose any time on the car by going over this system once in eight months. I claim that at the end of sixteen months the car will have less material on. It was a long time before we could get painters to use that enamel finish on trucks. We used to clean a pair of trucks, get all the grease off, sandpaper them, and give them a coat of flat color, and stripe them, and all that sort of thing. I know it was years before we could get them to use enamel on trucks. Now, we are perfectly satisfied with one coat of enamel. Gentlemen, I believe that the time is coming when enamels will be used on the body of the car.

MR. BRUNING: I want to come to Mr. Congdon's rescue on the acid question. I am an acid fiend. I cannot agree with what Mr. Butts and Mr. Miller have said with regard to the acid cleaner. I have used it for over fifteen years, and have got the cars to show for it. It is true that after I had gone over it with acid, I go over it with emulsion. We had this same question brought up on our road. The superintendent of machinery came up to me and told me that he understood that acid was ruining the varnish. We had a dining car that we scrubbed with acid every thirty days. That car ran over eighteen months.

MR. BUTTS: Mr. Bruning is doing exactly what I used to do. I think that what he has said is one of the strongest possible recommendations for an oil cleaner. I think that is the best kind of evidence. That is what I want to hear. He admits that he has to go over his car after he puts acid on, with an oil emulsion—two transactions at double expense.

MR. BISHOP: I wish to place myself on record as being in favor of an oil emulsion as against enamel. I spoke of trucks being enameled and they wore well. The emulsion, which would be used at terminal points for cleaning, would increase the life and service of the car.

MR. BROWN: I figure that there is quite a little point between our old varnish color today and the enamel. We used to get our color dry, and we would pulverize it and grind it ourselves, adding it to the varnish, which was not a very satisfactory method. Today we get the color ground right in the varnish, which gives entirely different results. We can rightfully expect that we are going to get different results, because the varnish and pigment come together in a different form than we used to put it. I have tried both ways and

I get far better results with the present enamel and varnish with dry black, ground right in the varnish, than to take the Japan color and mix it with the varnish. The body color of Mr. Arlein's car is yellow. That is the reason he did not get the results out of the varnish color because, as Mr. Opp says, it is largely composed of lead, and you cannot make a very good enamel of it, or varnish color, whatever you may call it. We get far better results now with the pigment being ground in with the varnish than we used to when we added the color to it ourselves.

MR. RUSSELL: I have used this enamel, or varnish color, quite extensively, and I could not do much with it where you have bold striping on your cars, in order to use it successfully. As far as time is concerned, I cannot see anything in the time saving at all. The result was that when you tried several times putting on your varnish colors, it would crack. I am a great advocate of the repeating process. Always repeat, put on three coats in not less than three days. That is the reason I cannot see any thing is saved in the way of time, because you cannot do that with enamel; it is a little bit too quick. The best success I had was with Tuscan red. That is a strong color and makes the first coat very strong. I mix the Tuscan red with varnish, and got all the covering qualities. At the same time I am doing it with two coats, but I cannot do it in less than three days.

MR. HUTCHINSON: With reference to this enamel question, the proof of the pudding is what we are all going by, and from my experience, I cannot agree with Mr. Copp or Mr. Congdon. The question, boiled down, it seems to me, is one of time, as my friend Butts has mentioned, and getting the car back to the shop and taking care of it afterwards is the question. A car running under a varnish color, from my experience—and I want to say right here it is only from samples, I am speaking, and not from an entire car for I never thought it best to go that far—when a car is out under varnish—with one coat of enamel—as I believe one of the gentlemen advocates, you do not get the opacity in the first place to properly color the discolorations usually on a car with one coat. Then, you destroy the durability by adding more color and not having enough varnish; consequently the car comes back to the shop in a perished condition, and particularly at terminal points where the cars are cleaned the results would be disastrous to the coating. If you use, as many of us have to resort to, the soap and water process, you certainly will have disastrous results. If you use an emulsion cleaner, and that is satisfactory altogether, then I admit, perhaps, you might make a success—to suit you; it would not suit me altogether. So I think, that when you come to consider the time in getting a car—and on the Grand Trunk road, at London, we have an equipment of nearly four hundred cars to take care of on the Northern and Middle divisions of the road, and you can understand that we cannot get those cars into the shop every eight months to go over them with a varnish color. Consequently, as far as that is concerned, I could not advocate the use of varnish color, or enamel, as some call it.

I believe the proof of the pudding, as I have said, is our guide; and I cannot understand with the addition of the neces-

sary quantity of color that you must add to the varnish, that you can get the desired durability to stand the cleaning that we have to give the cars to make them acceptable.

MR. PITARD: While the question of durability of the varnish color is under consideration, I wish to say, it is well known that color is one thing and varnish is something else. Color, as we understand it, is applied to any construction of a car or anything else to get the desired color; and varnish is to protect that color, but where we mix the two together, in order to get there a little quicker—to get the same results a little quicker—we would be apt to get into the woods, for the reason that it has already been determined that some pigments are more durable than others. Now in making a color, that is color composed of more than one color, two or three or more ingredients are mixed in order to obtain the desired shade or color. In that combination it is possible and probable in some instances that a pigment will be introduced that is very susceptible to atmospheric changes, and gas and all those things that have a deleterious effect on paint pigments. We know that solid color—that is, color that contains only one ingredient—in some instances is less susceptible to these gases and acids that I speak of, and others—take, for instance, black, that you know is composed of carbon, and carbon is considered an inert substance—carbon in some forms, such as graphite, will stand a very high degree of heat, as you know. Take lamp black, or any kind of black, black lead and those things, they all belong to the carbon family. It is a recognized and admitted fact that the compounds of those pigments are inert, and not susceptible to any kind of acid which ordinarily destroy the pigments.

Now, what I term compound enamel, in my experience, will not wear like enamel composed of only substance. My experience has been that enamels composed of red, black and yellow, which I believe are the constituent ingredients of our body color, will, in certain conditions, spot, and will not stand the wear like enamel composed of only one substance.

Now, I am reminded, in the consideration of this subject, when I think of the theories and opinions advanced by some brother members here, in order to obtain quick results, of the Irishman and the curry comb. An Irishman bought a curry comb to curry his horse, and the man selling it to him, praised it highly, told him to use it and it would amount to half a horse's feed. "All right," replied the Irishman, "I will buy two curry combs, and I won't have to feed him at all." (Laughter.)

MR. COOK: This subject is divided into three headings—economy, durability, and quality. It seems to me that the question of enamel painting has its place. It looks well in its place; it fits its place beautifully, but there is a possibility of it being out of its place, and that is the question we seem to be considering at the present time—to what extent we can use enamel paint and get economy and durability. There has been a diversity of opinion already expressed, and I think there will be if we sit here for another twenty-four hours. I do not think we have evolved out of this question what there is to be evolved and it will take a great deal of more efforts on the part of every master painter before we can determine

as an association to what extent we can get durability and economy out of enamel paint. I think all of us will agree that to get an A No. 1, first-class job of painting we are not yet satisfied with enamel paint. (Applause.)

I have used it to some extent and when it comes to passing a job out of the shop, I have been compelled, with the best enamel I have so far used, to add a coat of varnish before I felt I was perfectly justified in submitting it to the wear and tear of service.

MR. BROWN: I see we have a good friend of ours, a member of the supply men, with us, and I have no doubt at all but that he would willingly give us a little of the outline of the preparation of enamels. I would respectfully, on behalf of our gathering, beg permission to have Mr. Marshall say a few words to us.

PRESIDENT LANFERSIEK: If there is no objection, Mr. Marshall will have the privilege of the floor.

MR. MARSHALL: In the capacity of varnish maker I have tried to keep up with the race, and in that connection think I have kept fairly well posted as to the manner and methods of how things are done. My earliest recollection of coloring varnish is, as Mr. Brown said a short time ago, grinding the dry color in the varnish. That was something like forty years ago. That particular color was a bright English vermilion, ground in a good, serviceable, durable and elastic varnish. I emphasize that because a great deal depends upon that proposition. Another thing was, it was not for outdoor exposure; it was for some trimming on the inside, or in the stock room, where it was kept very pretty. For a number of years that vermilion and varnish background together worked well. It was about probably twenty-five years ago that the subject of enamels was brought before the public, not for railway cars, but for what is largely used for household purposes. I think any of you will remember when it first began to be put upon the market by catchy advertisements in the magazines and papers, showing how a man, woman or child could lay it on and produce beautiful results. I need not enlarge upon the thought, from your standpoint as practical painters of cars, that what would do for the kitchen or the baseboard around a dining room would not do for the outside of a car. Mr. Pitard has brought out some very good points when he spoke of the difference between having the color in the varnish of one pigment, and having it of several. The principal point brought out by that is the disturbing effect of one color upon and over another. Some are very fugitive and the color might be green, blue or yellow at the start and turn brown, black or white in a very short time.

What I want to say first about this thing is—and we need think of it only for a moment—when you put on enamel, so-called, you are putting it on for economy in time, for economy in material, and for economy in labor. You get any of the celebrated enamels advertised so much, and you get two in one, and you put on in one application what takes two—saving labor and material. But you have got, as someone remarked, a small part of varnish and a large part of pigment, and, as is well understood, varnish is not only a beautifier and gives lustre, but it should be, above all things, a protection to

the colors that are under it. You have these two ground together between two stones. I want to say to Mr. Brown that the difference in grinding between now and the time he referred to, is very great. In those days they had a muller and a flat stone. Of course that is now done with very much skill between two heavy water-cooled stones, and by that process they get their pigment infinitely fine, when the varnish is being ground in it, and you have a much smoother and much more brilliant surface than you could get by the hand-mill or the old muller stone; the fact remains, however, that you have in ounces and pounds more color than you have of varnish, the object being to get the covering qualities first. That is necessary, and the next object is to get it out with as much dispatch as possible. The moment that question comes up you defeat the object of durability, because the manufacturers must cater to that primarily in making their enamels. The quick varnish is not durable, and in a short time, naturally, with the hardening of the pigment, you will have a brittle surface. If the color and varnish is to be used simply for the saving of labor, and not considered from the standpoint of saving the material, you will get better results. If you insist upon a quick drying color you defeat your object. There are other points that I could enlarge upon, but I am not here to tell varnish secrets. I will say this much: It some times happens that certain pigments will not take a great deal of varnish or oil, and after you get more than a certain percentage of varnish or oil in, you have a coagulation, and, some times, a separation. So in a large measure, if you will insist on having a quick hard-drying gummy varnish, as I have already said, that defeats the object of durability. I believe, all things being equal, if your superior officers would permit it, the old-fashioned way of putting on paint for platforms and trucks and then put on a good durable varnish, you would have much more service out of it. If you are on the platform or floor of a car, you are walking on the pigment and varnish, and no matter how finely the pigment has been ground, the abrasion of your foot will more or less disturb the pigments, but if the pigment is protected with varnish, you have first to break through the varnish. If the varnish is good, you all know how long it will last. Continual stepping on it will break through the best varnish made, but you cannot get down to the pigment until you have gone through that varnish. (Applause.)

Mr. Brown: I think I voice the sentiment of every one here when I say that we are very much pleased that Mr. Marshall has consented to say a few words to us, and I would move that we tender a vote of thanks to him.

The motion was seconded and carried.

MR. GOHEN: Mr. President and members of the association: I was not in the room when the papers were read and I regret very much that I was not. Perhaps some of you have noticed that for once I have not talked much during this convention, and it has been quite a severe task. By making a few inquiries I find that two of the papers read here favor the varnish color, or enamel process, and one rather does not. Now it occurs to me that this association some years ago—and I think it was at Detroit—almost unanimously decided

that the enamel process was not the proper thing for the railways to adopt, and before I get through I shall say a few words personal and pertinent to this question only. There was a certain road in the middle west that some six or eight years ago took up the question of the enamel process and exploited greatly what economy there was going to accrue to that railroad. I want to say to you that if there was a railroad in this country that had cars less ordinary looking than that railroad, I don't know where it is.

Now I wish to say to you that there is some pride in railroad car painting. There is a quite a difference now in the painting of our equipment than what it was forty years ago. It is not quite forty years ago since I got into the railway business, but it will soon be, perhaps fifteen or twenty-five years from now (laughter) I am not going to tell you how old I am. But I remember that at that time there were hardly two coaches painted alike on any railroad in the country. They did not have dining cars in those days, but the parlor, or chair cars, as they were called then, were very elaborately ornamented. If you had a private car, the same thing was there. If you had a second-class coach which ran adjacent to a first-class coach, its ornamentation was not so elaborate as the first-class coach; and the foreman painter—I am looking at him right now, Mr. Marsh, the first man I ever worked for on the railroad—used to sit up nights thinking how many different styles of ornamentation he could put on his coaches, yet the object was not to get two coaches ornamented alike. We have learned as we go along. We are always learning. We have found out that it is a good thing not to put elaborate ornamentation on our first-class cars, but to put the same ornamentation on those cars that we put on the second-class cars, but when we come to baggage or postal cars, which are subjected to severer strains of weather and service, there we probably omit all ornamentation, which is all right; but the general public will choose a nice, plain, clean, beautiful car, rather than one that is dirty, dingy and old, such as you will put up with your enamel process. (Applause.)

I will say to you that you can go into any union railway station in this country, and if there is one railway running in there that is competing with another one, and they have fine equipment, and the passenger has his choice between that and one which has the enamel process on, nine out of ten of the traveling public will take your nicely painted car in preference to the other one, and let them be built exactly the same.

In St. Louis, there are some fine trains running there. I am not saying anything about our own now, but I am going to mention one road that has a train running in there, gentlemen, that is a credit to that railroad, and that is the train running between Chicago and St. Louis on the Chicago and Alton, and I have heard innumerable compliments paid that, simply because they have finely painted cars. If this association, knowing well in their hearts the difference between the enamel process, and I will say even to looks, to say nothing about economy or durability—even to looks, this association knowing well in their hearts the difference between

those two styles, I will say to you, boys, don't go back on varnish. It is the salvation of your company. This railroad which I referred to, which exploited this enamel process so loyally, telling how many thousands of dollars they were going to save that company in years to come, in using the enamel process, is not using the enamel process today. It did not take them more than two years to find out that in the end it cost them pretty near twice as much money to keep their equipment up, and they never had good equipment at that. The result was that they went from one extreme to another, and having their stomach full of enamel process, they went to varnishing and ornamentation too far. That shows you they were tired and sick of that enamel process. There are some places that it can be used; it may be used on the trucks, may be used on the platform, may be used on the engine, which is never clean from the time it goes out until it comes back, but, boys, for your own reputation keep it off of your coaches. (Applause.)

Now, I am sorry I was not here when those papers were read because they might have enlightened me as to some points that were brought out in favor of this enamel process, but I am going to make a little statement which will explain to you why I have spoken on this subject alone. I am going to leave you. I am going in the supply business. I cannot get an interest in a railroad, but I can get an interest in a supply company, and while I regret that I am going to leave you, yet it is to my personal benefit, and for that reason, knowing I was going to leave you, and that some of you might construe a personal motive in my speaking here upon some of the subjects that were brought up, I refrained from doing so. I shall enlighten you all tomorrow about the subject, but keep enamel off your coaches.

MR. COPP: I am very much pleased, as the father of this subject, with the generous and spirited discussion it has received, and I am very well satisfied with the drift of it.

MR. GOHEN: As a member, I move you, that it is the sense of this association that enamel on passenger cars is not the proper thing for the railways to adopt.

MR. BUTTS: "As a finishing coat." Would you accept that? It is all right on a car covered with varnish.

MR. GOHEN: Certainly I have no objection to putting on a coat of enamel if they will only beautify that enamel.

MR. COPP: How about the decks?

MR. GOHEN: Decks will be all right, because nobody ever looks at them; but when a car is going into the station, you want to say, "There goes a nice car." You want to see a car coming out of the Pullman shop from your road a nice car. One of the most prominent railway men in this country, Mr. James J. Hill, who, ever since the time he first began to be connected with the railroad, which he now controls, did not consider the passenger business on his road as worth thinking about. He said, "I do not get any money out of passenger trains; and I don't care. If the people do not want to ride in my cars, let them walk. I get my money out of the freight trains." It is not more than thirty days ago that Mr. Hill changed that opinion, and has now ordered the finest equipment in the United States for his passenger cars. Now,

evidently, he has come to the conclusion that there is something in the passenger business, or why would he get the finest trains? It is said the trains that he is going to put on his road—ten complete trains—are the finest passenger trains that are on any railway in the United States. That shows, gentlemen, that Mr. Hill has woke up to the idea that there is something in having a fine passenger car.

A man that cared nothing for passenger cars, now gets the best there is in the country. Let me say in this connection to Mr. Gohen that the income of the Boston and Maine is about forty-five million dollars annually, about equally divided between the passenger business and its freight.

PRESIDENT LANFERSIEK: It has been moved and seconded that it is the sense of this association in convention that enamel on passenger cars for a finish is not the proper thing. The motion was carried.

PRESIDENT LANFERSIEK: The next subject is No. 8—"Are locomotives properly cleaned while in service? If so, by what method and material?"

The first paper is by Mr. J. B. Shuttleworth, of the Boston and Albany Railroad, Springfield, Mass.

MR. SHUTTLEWORTH'S PAPER.

Subject No. 8: "Are Locomotives Properly Cleaned While in Service? If So, by What Method and Material?"

Mr. President, officers and members: When informed by our estimable secretary that I had been chosen to prepare a paper on Subject No. 8, viz: "Are locomotives properly cleaned while in service? If so, by what method and material?" realizing my inability as a writer, my first impulse was to decline, but on second thought concluded that a poor attempt would be a little better than none.

The first question in the subject: "Are locomotives properly cleaned while in service?" In answering I think it can be truly said, taking them as a whole, they are not properly cleaned. The failure to remove thoroughly and evenly all dust and grease, also the using of oils which have a tendency to rot the paint and varnish instead of preserving them, I deem sufficient ground for the assertion that they are not properly cleaned. The increase in number of locomotives and the decrease in the number of the cleaning force, would, in all probability be the principal plea in any excuse that might be offered for the failure of not having properly cleaned locomotives.

As to the method and material. You will generally find that the few railroads who are exceptions to the prevailing habit of not having properly cleaned equipment, that they have first, a sufficient number of cleaners, second, that each man is assigned a certain portion of the work to attend to and is held responsible for the appearance of that portion. The result of such a method is a nice clean set of locomotives. The material, from personal experience, I think should be an oil emulsion free from alkali, or acid. Such material not only cleans, but preserves the paint and varnish, and, as far as condition of paint on equipment cleaned with such material is concerned, will permit a longer time of service be-

tween shoppings, also reduce the cost of preparing and painting equipment when it is shopped. Compute the gain in time of service between shoppings and the amount of labor saved in re-painting equipment when shopped, and I think it safe to say that the difference in cost of an Emulsion cleaner above the cost of illuminating or lubricating oils, which have been and are still used to a great extent, would be equalized.

Trusting that the members will not hesitate in pointing out any errors or short-comings in my attempt as a writer, I am, Respectfully,

J. B. SHUTTLEWORTH,

F. P., B. & A. R. R., Springfield, Mass.

PRESIDENT LANFERSIEK: The next paper is by Mr. David Murray, of the Pennsylvania R. R., Pittsburg, Pa.

The paper was read by the secretary as follows:

MR. MURRAY'S PAPER.

Subject No. 8: Are Locomotives Properly Cleaned While in Service? If so, by What Method and Material?

The first part of this question naturally opens up a subject that might perhaps be better considered by officers directly in charge of locomotives on the different railroads, than by the master painter, because the duty of cleaning locomotives, while in service, devolves upon the round house foreman and a portion on the fireman. I cannot at this time, however, refrain from advancing an opinion on the subject based upon my observation of the different methods employed in using the locomotives. The duty of properly cleaning a locomotive while in service and keeping it neat and tidy as stated before, belongs to the round house foreman and fireman, when power is scarce and it becomes necessary to pool the locomotives, supplying a different fireman for the locomotive on every trip. The inducement to clean it properly is removed and we see locomotives coming to the shop in a very unclean condition. The fireman will not clean them because somebody else gets the locomotive on the next trip. On the other hand if a road has a sufficient number of locomotives to permit them to be used on so-called "assigned runs," where each locomotive is in charge of say not more than two firemen, one on each alternate run, these firemen would take great pride in keeping their locomotives clean. I notice that the locomotives are maintained at all times in a better condition and may then be said to be properly cleaned while in service. With us, the painters duty on the locomotives commences while it is in the shop undergoing class repairs, and it is then that the painter may readily notice the difference in the conditions of the locomotives which have been "pooled" from those assigned. Our method of preparing the locomotive for re-painting, while it is in the shop, is by no means a novel one, but is, I believe, in quite general practice. As a matter of possible interest, however, I will state that all grease and dirt are first scraped and removed from the locomotive. When the locomotive is found to be in bad condition and the grease and dirt do not yield readily we use carbon oil to cut them. Next the locomotive is carefully scrubbed with a solution of soap with a small percentage of lye, which thoroughly removes all grease and dirt, and prepares it for painting. The painting of locomotives is so familiar to all that it is un-

necessary for me to go into details; I would, however, digress from the subject of this paper to suggest that much better results in painting locomotives might be obtained if a more suitable place than a round house for doing this work were provided, as we well know that the soot, steam and dirt to be found in all round houses injures the work when the painting is completed. In cleaning locomotives and tenders, which do not require re-varnishing, which work is usually performed by round house employes and not painters, the material used for such cleaning should not contain lye or other ingredients that will effect varnish, but will preserve the same.

Respectfully submitted, DAVID MURRAY,
Master Painter, Pittsburg, Pa.

PRESIDENT LANFERSIEK: The third and last paper on this subject is by Mr. E. R. Clare, of the Southern Railway, Birmingham, Ala.

MR. CLARE'S PAPER.

Birmingham, Ala., Aug. 26, 1905.—To all officers and members of the M. C. & L. P. A.

Gentlemen: With a view of perhaps being of some service to the convention, and in hopes of something, or everything, I say, calling forth abundant criticisms, thereby inaugurating a debate that will develop points and facts which will be helpful to all interested, I have accepted the invitation of the Advisory Committee to take up Subject 8, viz: "Are locomotives properly cleaned while in service; if so, by what material and method?"

When I considered the above question, or rather questions, as you will notice there are two separate and distinct ones contained in the subject, I found that I could answer but one of these, as they now read, because I do not think locomotives are properly cleaned, which, as an answer to the first question, would debar me from taking up the second, so I take the liberty to reconstruct the subject, thus: "Are locomotives properly cleaned while in service; if not, what is done as a remedy?"

Now understand me clearly. I am not condemning the foreman painter as neglecting his duty, nor being ignorant of same, when I say the engines are not properly cleaned, for I do not consider he should be responsible for abuses to painted work by road men while engine is away from the division terminal; and I know of no other name than "abuse" for attempts at cleaning by them, and this same abuse is the handicap to the proper cleaning at terminal by the foreman painter or whoever may be in charge.

You may ask: "What has been done to so seriously interfere with the proper cleaning?" Simply this: As every fireman is held responsible for the looks of his engine, he will try to have it looking nice with just as little work as possible, and the consequence is a good, generous application of oil, of any kind handy, with very little wiped off—the result can readily be seen: a coating of gum and grit which cannot be removed by an ordinary process of cleaning, but requires extra work, which is both costly in time and injurious to paint and varnish; furthermore, a percentage of the oil pene-

trates to the metal, and it is but a matter of time until scales or flakes of paint can be detected raising.

It is hardly necessary to state that this practice is not permitted by the management, but is one of many labor saving tricks. I do not mean to say all foremen have this evil to contend with, but am satisfied that some do, and others, no doubt, have something else equally as bad to call for a too vigorous process of cleaning, if anything like a good appearance is obtained.

When engines are in this condition I usually go over worst parts with benzine enough to remove grease and gum, then wash with soap. If parts thus cleaned have an ashy or dull look, brighten with car cleaner. As to engines in ordinary condition—by this I mean those that have not been “doped” with oil, etc.: I cannot say that I follow any set rule for cleaning, but make each engine a class in itself, and each part according to its needs. If dusty, use dry waste, being careful that wires, straws, etc., are removed from waste so as to prevent scratching of varnish; where there is a deposit of soot, mud stains, etc., use car cleaner, but at times I find it necessary, after repeated applications of this, to use benzine first and then follow with car cleaner, and, by all means, see that parts are wiped thoroughly dry—if this is not done there will be trouble galore when cleaning after the next trip; furthermore, the car cleaner, if left on, will have a tendency to bring about bad results.

On tanks and sides of cabs, wiping with dry waste, with an occasional washing, will generally suffice and be preferable to most any other mode of cleaning.

Respectfully submitted, E. R. CLARE,
Foreman Painter, Southern R’y Co.

PRESIDENT LANFERSIEK: You have now heard all the papers on the subject No. 8, and it is now open for discussion.

MR. BRUNING: I notice that Mr. Clare states in his paper that it is vital for the painters to clean the engines. We all admit that. But is your management liberal enough to allow you enough help to go into the round house and clean the engines. We know it would be nice if we could have the engines cleaned in the roundhouse, but I do not think it would be advisable for us to take hold of this, with the limited amount of help we get nowadays. We are not allowed to have an extra man, and you are probably short in the shop, and then to go out into the round house and clean these engines—I don’t agree with him.

MR. CLARE: It was formerly done under the supervision of the grease wiper boss, but they looked over the work about like they would the under part and it was very carelessly done. The management recognizing how necessary it was to have better care over them, they put it under the foreman painter, while the men were carried on the round house pay roll. There was quite a controversy came up and they turned it over to the foreman painter, and now I look after that part of the work.

MR. BRUNING: That is about the way we do. We have the foreman of the wipers educated, so he can do it equally as well and I supervise the work, furnish the necessary mate-

rial and instruct him, but I would not be in favor of taking a lot of painters out in the round house.

MR. CLARE: No, not as painters.

MR. BURTON: Brother Clare failed to state that the engines on our road are striped with a gold leaf. The question of cleaning in the roundhouse has been placed under our care, but not at our solicitation, and we feel that we are here to get information, if possible. We take care of only 201 engines at our terminal. I cannot tell what percentage of passenger engines, but our master mechanic has stated that we must clean these engines. We are here to get information. If we are not doing it right we want to get right. We use an emulsion cleaner and, as he said, we have different applications, and get different results. Our freight engines are not varnished. Of course we run up against similar processes very often, and I listened very attentively to that question here today. Our passenger engines have two coats of locomotive varnish. As I say, we are here for information. This is a subject particularly that brought me to the convention. I did not ask to come to the convention. I submitted to our master mechanic the subjects to be discussed here, and I have recently taken up this subject, which we think is a very important one. I infer from the talk here today that engines are not given much consideration. If there is anything better than an emulsion cleaner we want it. We have tried soap in some places and that answers the purpose very well. I would like to hear some discussion on this subject.

MR. BUTTS: I have been interested in this subject, from the fact that I have had this department to look after for a long time, and have tried almost every known method to keep paint clean on a locomotive, but for the past year and a half or two years I have settled down to cleaning our paint on the locomotives practically in the same way that we do on our passenger equipment, and we are getting splendid results. Our equipment certainly looks very much better than it ever did under any other process. We aim to get them to our large round house and have a man at the head of the cleaning force, acting as a working foreman, so to speak, and our policy is to instruct him in the use of these materials, so he can instruct his men how they should be used. The material we are using is made in two forms—a thick emulsion—you might call it a semi-paste—and a thinner that goes with it, which is a thin oil. We use the thin oil in cleaning our tanks and other varnished parts of the locomotive every trip, instead of trying to wipe the parts of the engine with a separate piece of waste with these oils, but you will find that after doing that for an indefinite length of time, that the tank especially becomes very dirty and you will have to resort to giving it a more thorough cleaning with an emulsion. We have no set time as to when this heavy cleaning shall be done. We leave that to the judgment of the man in charge of the cleaning force. Whenever he thinks the tank is getting so dirty that he cannot get it off with the thinner, he goes and cleans it thoroughly, and follows it up with an oily waste. We think we can wipe off the tank with oily waste in very near the same length of time that we could properly wipe it dry. If you will resort to the various kinds of oils commonly

to be had about the round house, you will find you will not get good results. A great many oils will soften your paint and injure your varnish, and practically destroy it in six or eight months. We find it pays to use the proper material. You need to carry it out systematically, and if you do you will find this system will pay, and you will not need painters to wipe the engines. Our common rate for labor of this kind is fifteen cents per hour for help to wipe the locomotives. We find where there are four or five men doing it, it pays to have one man who has had experience and intelligence enough to direct them in their work.

MR. CLARE: After several applications in oils or fillers mentioned, you have something of a gummy nature to contend with.

MR. BUTTS: The material we use does not form a gum. It is absolutely non-drying. It will never dry and never injure the paint, no difference how long it remains there. I will positively guarantee that it does not harm the paint, but for all that, there will certainly be an accumulation of dirt. You leave a little deposit each time, and in the course of a week or two your tank will become dirty. Then we give it a heavier cleaning, which takes off all the dirt down to the paint.

MR. CLARE: I attempted the same thing, and found it would be almost impossible without extra long efforts. Therefore I mentioned in the paper that I used at times a little benzine in the waste to cut this gummy dirt.

MR. RODABAUGH: My experience has been, especially with a freight engine, that when it goes out from the shop painted that is the last it gets until it comes into the shop again to be painted. Passenger locomotives we do clean occasionally. I would be glad if we could get them every two or three weeks, but if I get them every two or three months I will be in good shape. We clean the passenger locomotives whenever we get an opportunity, but the opportunity does not come very often, and we clean them with crude oil. I believe those engines will compare favorably with engines cleaned with anything else. I do not use anything else. We do not clean anything but the drivers, cabs, domes, etc.

MR. KEIL: If any of the members like the job of cleaning an engine, I hope they will get it. I have had it for nearly two years. I have a force of thirteen men who do nothing else. They work on piece work. They worked at day work for six months, and we found the best plan was to adopt piece work. The first plan was simply to clean the cab, upper works, etc., and after running one year that way the management found that part of the engine was all right and were well pleased with it, but a short time ago they thought the jacket, wheels and pilot, as well as the rest of the engine, should be turned over to us, because we were doing so well. Now, we have got that, and if any of you want it ask for it when you go home. I believe we have made improvements since we have taken hold of it. I don't work the men over the entire engine. I keep a man on the tender and cab separate, and they do better work that way, and can keep track of the piece work better. Our cleaner is an oil cleaner or emulsion, as they call it. Our system is to clean every engine once a month thoroughly. Three of the men do what we

call drying and wiping. The gang foreman watches the board and when the dispatcher writes up an engine, they pick that engine out and clean her. We aim to get every engine that goes into service that day. After the passenger engines are cleaned down they devote the balance of time to the other work. We stencil the frame once a month, but if we find an engine has been in hard service, and each time it ought to be cleaned again, the gang foreman calls my attention to it, and I order her re-cleaned, or thoroughly cleaned. I favor an emulsion cleaner for locomotive work.

MR. ALBRIGHT: Why the cleaning of an engine should come under the work of a foreman painter in a railway shop I do not know. Brother Clare says he has charge of the cleaning, and I would like some brother to explain why cleaning an engine should come under the work of the foreman of a paint shop?

MR. QUEST: I would like to ask Mr. Albright who would be better qualified than the foreman painter if he had the time and force of men? He has usually got a great deal to do and it is a matter of just adding a little more on. (Laughter.) The painter is a pretty tough proposition and it would be a long while before the last straw would do any breaking. I wish to say that on the Pittsburg & Lake Erie we have some such system as Brother Clare has, round house cleaning of engines under the supervision of the foreman painter. We have two tank wipers and two men do the top work, and we have something like 184 engines at present. There was a time when we had 205 that were taken care of by the six men—that is, four wipers and two front-end men. Now, I want to say that they are leading a strenuous life—the six of them. They are doing the best they can and if any of you folks are acquainted with the Pittsburg & Lake Erie engines you know what the results have been. We aim to do the best we can with that force. Four are on the paint shop rolls, and two on the round house rolls, but I do not see that that cuts any figure. The railroad company pays them their salaries. While the cleaning is not done by the painters it is done by the wipers. We use emulsion, and when it is dirty give it a scrubbing.

A motion at this point to have the delegates photographed in a body was carried.

The convention here adjourned until 9 o'clock a. m., Friday, September 15, 1905.

FOURTH DAY.

Friday Morning, September 15, 1905.

President Lanfersiek called the convention to order at 9 o'clock.

PRESIDENT LANFERSIEK: The first business this morning will be to answer queries. No. 1 is, "How do you remove old paint from front ends of repaired locomotives?" Does any gentleman desire to give any information with regard to that matter?

MR. DANE: In answer to that question, I would state that on our road, when the engines are in for general repairs, the front end and stacks are scraped, and one thin coat of engine finish applied. They are taken care of afterwards at the

roundhouses. That is what we do with our front ends when the engines are in for general repairs.

MR. HOUSER: You do not have anything to do with the front ends after the engine leaves the shop?

MR. DANE: No, sir.

MR. HOUSER: Do you know how they remove black from the front ends in the roundhouse?

MR. DANE: I do not think it is removed on our road unless it it burned off.

M. HOUSER: We remove ours with a good scraper and plenty of elbow grease back of it.

MR. DANE: In your shop?

MR. HOUSER: Sometimes we do a little work on them in the engine shop, but we have no control over the men in the engine house. When the engine leaves our shop it is practically out of my jurisdiction, or inspection or anything of that sort.

PRESIDENT LANFERSIEK: As far as we are concerned, we use elbow grease and a scraper.

MR. LITTLE: It costs about \$5.00 to take it off right.

PRESIDENT LANFERSIEK: No, it does not cost that much. That is our method and the only method we ever had,—scrape it all off during the time the engine is in the house for repairs. We also do as Mr. Houser says, in the roundhouse, at stated periods.

MR. LYNCH: It is our practice at Dennison to scrape it all off and renew it.

MR. BROWN: I have had the pleasure the last year of working more on locomotives than on cars, having that matter in charge, and I find that the material gets on there so hard that we take what might be termed a pening hammer and pound it. The front end is the worst part. The upper part is not so hard, but underneath the only thing we have employed yet is what might be termed a pening hammer and pound it off.

MR. SHUTTLEWORTH: I leave the front ends go until the last, for while they are working with the pneumatic hammers, I find it causes a vibration. The lower part that requires a good solid elbow grease.

MR. BROWN: I think for that purpose something in the form of a chisel could be utilized. I think it could be used very advantageously, because it would everlastingly rap away there—something in the form of a chisel.

MR. SHUTTLEWORTH: It would cut steel, I do not see why it would not cut that.

PRESIDENT LANFERSIEK: Mr. Rodabaugh, we are trying to answer the first query, "How do you remove old paint from front ends of repaired locomotives?"

MR. RODABAUGH: Scrape it off with scrapers made out of old files.

MR. WHITTINGTON: Take old files and scrape it off. That is the best way I have found of doing it.

MR. JAMES: I have tried several solutions and always failed. We find you have to chip it off and scrape the balance.

PRESIDENT LANFERSIEK: We will now pass on to query No. 2—"What oil do you use for rubbing down car interiors when newly varnished?"

MR. SHORE: On our line we do not use any oil for rubbing. We use pumice and water. For the interior finish we use OO finish. I think it is manufactured by the Pennsylvania people.

MR. BAILEY: What is the question?

MR. LANFERSIEK: "What oil do you use for rubbing down car interiors when newly painted?" Mr. Shore rubs with water. His method is not pertinent to this question. After the car is varnished you rub with oil.

MR. BAILEY: I have always used what we call raw linseed oil. The Lord only knows what it is made of, but that is what it is called. I never used anything better. I don't know what we get now, but it is called raw linseed oil.

MR. HOUSER: We have been using linseed oil, and a certain percentage of good petroleum with it.

PRESIDENT LANFERSIEK: Why don't you use petroleum altogether?

MR. WILKINS: We use olive oil.

MR. SCHUMPP: I use non-drying oil for all new or old work. The oil is called machinery oil. We have no trouble whatever.

MR. BUTTS: We are using a non-drying oil. It has a percentage of mineral oil in it, a special mineral oil, with also a percentage of turpentine and benzine. It is very thin and acts very nicely. I am in favor of a non-drying oil. The fact is if it should occur in hurried work, which is not properly wiped off, which is sometimes the case, there is absolutely no harm to come from a non-drying oil. For instance, if you have rubbing down work to do, and the man did the work hurriedly, and it was necessary, for some reason, that it should stand over until the next day before it is entirely completed, if you have a non-drying oil no harm results, while if you use a drying oil, you have got to complete the job while you are at it, and be careful to get it all off, or you will have a gummy substance left. In these days of rapid work we have got to guard against everything of that kind, and we have an advantage in using a non-drying oil.

MR. BAILEY: If your raw linseed oil was wiped off thoroughly dry, wouldn't you consider that better for the varnish than the oil you are using?

MR. BUTTS: I am not prepared to say that I would. For many years I was of that opinion, but from the fact that we had the difficulty I spoke of on cars where there is considerable carved work, and we would find places here and there where the linseed oil had not been thoroughly wiped. So we experimented with the non-drying oil, and the result appears to be equally as good as when we used the linseed oil. It wipes off more readily, takes less labor, and we have no trouble drying in the corners here and there, where the work might be carelessly done.

PRESIDENT LANFERSIEK: We will now pass to query No. 3—"Is not there some other way that can be devised to clean car glass in shops than by hand?" The custom now is to clean the windows in the car and do it by hand, a man inside and one outside, so as to get all the dirt off. The object of this query is to know whether there is not some

other way to do it, in order to lessen the labor. Has any member got anything to offer?

MR. BRUNING: We never had much of that trouble, because I always insisted on the glass being thoroughly cleaned while they were cleaning the sash. After going after the men for about a year we finally got that thing done, so there was no trouble.

PRESIDENT LANFERSIEK: Suppose the carpenters would dirty them up?

MR. BRUNING: That would wipe off readily. I have been in shops where it has really cost more to clean the glass than it did to paint the sash—carelessness on the part of the men. My past experience has been to make the men be careful, and you will find you will have very little varnish or paint. If a man is a practical mechanic, there is no reason why he should get any paint on there.

MR. BUTTS: When you get to working piece work, the men are apt to be a little more careless when an inspector is not around, and we have adopted a plan which has been a great benefit to us in the way of cleaning glass and saving labor. Every practical painter will admit that it is quite a difficult thing to keep in close enough when you are putting on the various coatings on the frame of the sash—that is, it is difficult to keep off the glass, and the paint and varnish that you get on the glass is quite difficult to remove, and, as Mr. Bruning states, it often times costs as much as to paint the sash. We have adopted this plan: Graining our sash imitation mahogany, that brown coating is practically a flat coat. We allow the painters to cut right out onto the sash, and paint with a brush and take no precaution whatever to keep off the glass. Then in our varnish and graining coats we come on top of the flat coat on the glass, and when you come to clean the glass, you can take a sharp putty knife—that flat coating does not adhere like varnish—and you can scrape it off easily. All that is left you can wipe off very easily with water, with a weak solution of wood alcohol that we use. By pursuing that we are able to get our glass cleaned very cheaply. We clean the glass coming from the sash room before they go into the car.

MR. MARSH: We use the same method.

MR. SHORE: At the Collingwood shops we adopted the same thing. As Mr. Butts says, if you will take a sharp putty knife, it will do it. We clean them before they are put in the car.

MR. FRANK BAILEY: We have a man inside the car and one outside. We use fine pumice stone and water, and find it cuts all the dirt off.

MR. MANN: With regard to cleaning cars, my custom has been in the past, after the sash leaves the sash room, where they are thoroughly cleaned, we caution the men to get as little paint on as possible; then I do not have much to clean afterwards.

MR. BUTTS: There is one point I intended to speak of, and that is, in painting the sash, and not being careful to cut in, you have this advantage: There is often times a very fine crack or opening scarcely discernible between the wood and the glass. By flowing your paint on freely, you get paint into

that crack, which is a benefit, as it prevents the water from soaking through, especially on the lower rail of the sash. You have the advantage of getting that thoroughly filled with both paint and varnish, and we find our sash wear better than they did before, because it is quite a difficult thing to get that opening filled, without going outside on the sash with a brush.

MR. HOUSER: I would like to ask what they clean glass with in the car-cleaning yard? What is used?

MR. RODABAUGH: After our sash leaves the wash room and goes into the painting department, the workmen have a piece of tin or sheet iron, and paint the sash; after they are painted we clean them with material called "Clean-it," manufactured in Akron, Ohio. It not only polishes it, but cleans it at the same time, using nothing but water. I never had any trouble cleaning the dirt off, and get it off nicely with that. Sometimes we use waste and sometimes use cotton flannel.

PRESIDENT LANFERSIEK: You are of course giving your experience as to what you do yourself. The object of this query is to find out if there is not some other way than can be done by hand. You are all telling what you do by hand. Is there any other way it can be done, by machinery or some other way, besides hand work? That is the object of this query.

MR. BRUNING: I was thinking we might have experimented a little and used one of these pneumatic hammers? I am going to try it when I get back. We use tripoli for cleaning, mixed up in a paste form, and put a little on a sponge. One man goes around with the sponge and dips a little on, and another fellow goes around and wipes it off.

PRESIDENT LANFERSIEK: The next query—"Is paint removing from car exteriors by chemicals practicable and economical?"

MR. WHITTINGTON: I have experimented a great deal on this line, and I do not think it is practicable.

MR. HOUSER: I think in removing the paint from the exterior of a car with a chemical, for instance a varnish remover, I believe the material would cost more than the labor of burning it off. I believe I can burn a car off for about the price of the varnish remover.

PRESIDENT LANFERSIEK: You do not consider it practicable, then?

MR. HOUSER: No, sir; I do not.

MR. COOK: I was going to say I think we can answer that both in the negative and affirmative. What I mean is we can say it is practicable, but not economical. I think, as Mr. Houser does, that it would cost more for the material and would render the point of economy out of the question, but I believe some of the varnish removers we have at the present time we would find practicable from that point alone. I move that we consider it practicable, but not economical to use paint and varnish removers on the exterior of our cars?

The motion was seconded.

MR. BUTTS: I will give a little experience that we have had: We have had several parties approach us on that subject, claiming they could remove paint and varnish from the exterior of a car and do it successfully. In every case we have given them a chance to demonstrate what they could

do, and invariably I have laid this proposition before them: I would give them a statement showing what it cost us to burn it off, and I have said, "There is the car. You can take the paint off, and if you can come below those figures, you can interest us; otherwise, you cannot." I have never heard anything more from them after they made an attempt to do it, so far.

The motion of Mr. Cook at this point was carried.

PRESIDENT LANFERSIEK: We will now pass to query No. 5—"Does your road use metal train numbers in front of headlights? If so, what color are they painted, and why?"

MR. BAILEY: Our road uses metallic numbers in front of the headlight, and they are painted red, but I do not know why. I do not know by whose orders or anything about it, but I know they furnish a very poor material. It will dry in twenty minutes, and they have to be painted very often, but I am sure I do not know why they are red.

MR. BROWN: I think that method has been discarded by a number of roads. I know it has been by the road I am on. The numbers are on each side of the cage, as we term it, where the light is in, have number plates on each side. But putting the number in front over the glass—that has been discarded.

MR. BAILEY: Can you tell me who asked that question?

PRESIDENT LANFERSIEK: I could not say who originated that question.

MR. DANE: I think Mr. Copp, of the Advisory Committee, introduced that question, but I will not be sure. It was some member of the committee. On the Boston & Maine the metal numbers of the train are placed on the iron wire that runs through in front of the glass to designate the number of the train. That is for the benefit of the conductor and trainmen. Now, they are painted a bright vermillion, for what reason I never understood, and never could find out. I do not see but what black would be just as well as red, for the reason that in the night they look black, even if they are painted red.

MR. HOUSER: Do I understand that this is the number of the train, instead of the number of the engine?

MR. DANE: The number of the train.

PRESIDENT LANFERSIEK: We will now pass to the last query, No. 6—"What is your opinion of painting the exterior of car sash body-color?"

MR. LITTLE: I think if you want to imitate an old hearse or something, it is a good idea to paint the sash the same as the body color.

MR. RUSSEL: There is no more labor attached to painting the sash some other color than the body color. A man can paint it one color as well as another. In my opinion, it adds to the beauty of the car—being painted a different color—most any color.

MR. COOK: Gentlemen, the tendency now is toward plainness, but I think there is a point beyond which we could get. It is my opinion that to paint the sash the same as the body of the car is going too far. It gives it that dull heavy appearance and makes it naturally displeasing, and it seems to me it would be a mistake to do it.

MR. SHUTTLEWORTH: I think painting the sash the same color as the body is a good deal like that song sung so much—"All Coons Look Alike to Me."

MR. PITARD: I think the idea of painting the sash the same color as the body gives the car a very unattractive appearance, and I do not know of any reason for it, unless it is just as a measure of economy. It gives the car a very monotonous appearance, it gives it a very gloomy appearance, and makes it very much like a hearse, as one of the members suggested. I think it is very undesirable to paint the sash the same color as the body of the car.

MR. QUEST: I do not see where it would be a matter of economy. That is, where the sash is grained imitation mahogany. It takes more work than the ordinary coating, and I do not see where the economy plea would come in. You would simply paint the sash, in a large majority of the roads, and as our friend says, I think having the second color makes it a little more attractive, and if we are going to abandon stripes and all that sort of thing, I think we ought to have something there to take off that funeral appearance. I think we ought to hold on to the different colored sash.

MR. BAILEY: Our road paint and grain the sash, and if we should paint them body color we should certainly save the expense of graining, and I rather favor painting the sash. I think after a time we will get used to it, and it would never be noticed. The same as we have changed a good many other things in car painting. The decorations are nearly all left off, and after awhile we would get so accustomed to it we would not think of it. We are so used to seeing locomotives painted black today that we never criticise them, and I think it would be the same with the sash.

MR. BUTTS: I disagreed with Mr. Bailey as far as the expense is concerned. The expense of preparing the foundation for the painting of the sash is precisely the same as preparing it for graining, and two coats of body color, which you are obliged to put upon that foundation already prepared, must stand as far as the expense is concerned with the expense of graining. We make our foundation with the coat. You have got to have something to form the foundation. You have got to have a lead coating under there. We get our foundation for graining in that lead coating; consequently there is no additional expense after the foundation is made. We grain it. We put on two coats of body color, or grain it. We grain the sash cheaper than we can put on two coats of body color. We finish up the sash and grain them, and the expense for that is four cents cheaper for the sash than if we put on the body color.

MR. BISHOP: I agree with Mr. Butts in every detail. We grain our sash regularly every year. I would go further than Mr. Butts has gone. I agree that the sash when properly done with the proper foundation, does not require to be grained every time the car comes into the shop for repairing. We merely touch it up. A car that has the sash painted a body color—the same as the body of the car—will require equally as many times coloring as the body of the car itself. Our sash that have been grained are running in good satisfaction, but that cannot be said of the body color sash. I

don't care what color you put on, the same as the body of the car or another color. For that reason I consider grain-ing economical.

PRESIDENT LANFERSIEK: It seems to me that there is some diversity of opinion, and I believe we could give expression by having a vote on the subject. I will entertain a motion to that effect.

MR. LITTLE: I move that it is the sense of this meeting that the sash should be painted a different color from the body of the car.

The motion was seconded and carried.

PRESIDENT LANFERSIEK: We will now have the report of the Committee on Tests.

REPORT OF COMMITTEE ON TESTS.

To the President and members of the Master Car and Locomotive Painters' Association:

Your Committee on Tests beg to submit their report as follows:

Tests samples furnished by previous committee have been exposed since last convention and therefore show the additional wear.

The samples submitted consist of minerals, graphite, red lead, lamp black and asphaltum.

The choice in our opinion undoubtedly lies between mineral of Sherwin & Williams Co., or National Paint Co. and graphite, there being a wide distinction between these and the other materials.

We have added four more samples to these tests, the whole of which including key to same, we will hand to committee for 1906.

We will thank the members to examine samples in order to verify our report. Respectfully submitted,

W. J. RUSSELL,
GEO. WARLICK,
F. A. WEIS,
CHRIST. CLARKE,

Committee.

PRESIDENT LANFERSIEK: I would ask Mr. Wright if the Committee on Information has anything to report.

MR. WRIGHT: We have no report.

PRESIDENT LANFERSIEK: That concludes the regular business. Is there any new business?

MR. RODABAUGH: I move you, sir, that we continue Railway Master-Mechanic as our official organ for the next year, and that Mr. J. H. Pitard be appointed the official editor of the Painting Department, as our worthy brother, Copp, has resigned.

The motion was seconded.

MR. DANE: I think that motion as it is put now includes two motions. I think the motion on the official organ that we select should be made a motion by itself, and then a recommendation, perhaps, of some gentleman of the association to act as its editor. That is, a recommendation to the proprietor of any organ that we may select.

PRESIDENT LANFERSIEK: If it is satisfactory to Mr. Rodabaugh to divide that motion, it will be all right.

MR. RODABAUGH: I am perfectly satisfied.

PRESIDENT LANFERSIEK: Gentlemen, it has been moved and seconded that the Railway Master Mechanic be continued as the official organ of this association.

MR. COOK: It seems to me that is a pretty broad subject and needs considerable discussion. It is a matter which needs very careful and deep consideration, as to what shall be our official organ for the coming year. I am not prepared to say anything about it just at present, but I know there are men here who can, and it ought to be thoroughly discussed. I will say this, I spoke down in the lobby of the hotel this morning to one or two gentlemen who know about as much about it as anybody in the association and my expression was to the effect that I thought the Painters' Magazine would be a good paper for our official organ, but there were features about it that changed my opinion. The principal one was that it would not reach our superior officers, while the Master Mechanic does. It goes into the office of practically every master mechanic, and our proceedings, opinions and assertions come to their notice. In the Painters' Magazine, of course, that would not be the case. Now, the Painters' Magazine and some other railway magazines have a great deal about painting matters and a little too much of some matters that do not interest us, and it is a question just which we should choose.

MR. BROWN: I would like to hear from Mr. Copp as to whether it would be advisable to continue the Railway Master Mechanic?

MR. COPP: I certainly should recommend continuing that same paper, of course, disinterestedly. For the good of the association I recommend it. I believe that you ought to be represented in a railway paper by all means, and I know of no other so enterprising and practical in all its bearings. I should recommend you to continue it and have somebody, of course, to carry on that department in a good way, which would be to the interest of the association. Of course that largely depends upon the man who does it.

At this point the motion to continue the Railway Master Mechanic as the official organ of the association was carried.

PRESIDENT LANFERSIEK: Now the question of selecting an editor will be in order.

MR. MILLER: Do I understand that Mr. Copp has tendered his resignation?

PRESIDENT LANFERSIEK: If you read the last issue of the Railway Master Mechanic, you will see his valedictory there.

MR. MILLER: I move we say "no." I think we have got something to say about that ourselves. I think Mr. Copp has given us very good service. He certainly has given much better service than we have given him support, and I think if we pledge a little better support in the future, perhaps Mr. Copp can be prevailed upon to continue the editorship of the Painters' column in the Railway Master Mechanic. I really hope that this can be brought about. I have not contributed any more than anybody else, not as much as others, but I for one will pledge myself to do what I can to help Brother Copp out. I think we owe it to Brother Copp to give him

this support, and I really hope that Mr. Copp can see his way clear to alter his position and stay with us. I move that Mr. Copp be requested to continue the editorship of the "Railway Paint Shop."

The motion was seconded.

MR. PITARD: I have been speaking to several on this matter, who stated that they desired to have me succeed Mr. Copp in this position, and were it not for the fact that Mr. Copp had already informed me of his intention to resign, I would not entertain the proposition, but I wish to say this, that whatever action is taken in this matter I desire to be unanimous. If it is the desire of the association to continue Mr. Copp in this position, it is perfectly agreeable to me and I pledge him my hearty support.

MR. BROWN: I for one certainly hope, if Mr. Copp is willing—I would not attempt to compel him, because he is bigger than I am—but I certainly hope if he is perfectly willing and everything is all right between him and the other parties, that he will continue for another year at least, his experience is valuable to us and probably of a little value to himself. I certainly hope he can see his way clear to serve us another year in that line.

MR. BUTTS: I do not wish to embarrass Brother Copp, but I would really like to ask him if he feels he could possibly withdraw that resignation and serve us for another year. I for one feel that I should very much dislike to see him resign that position. I believe he has the moral support of every member of this association. While there are other men who could take that position and fill it creditably, no doubt, he has been there so long that we kind of look upon him as one of the family, and we do not like to lose him. I should like to see him, if he can see his way clear, to withdraw his resignation.

MR. COPP: Mr. President: I hardly know what to say under the circumstances. I will say, first of all, I thank you for your good words and confidence in me, and your esteem of my past work. That is very pleasant to me indeed. If you had undertaken to call me down, or perhaps turn me down in some things I have done, I could not much blame you; still I meant to serve the association to the best of my ability. I will not allow any man to say here that he has the interests of this association any more at heart than I have. (Applause). It has been my twelfth annual convention that I have attended consecutively, and I have worked early and late with my pen in this way. The reason I resign was not on account of dissatisfaction, ill-feeling, disinterest or anything of that sort, but I conducted that department, you know, for twelve years in the Master Mechanic and in other publications eleven years of which it has been our official organ and I felt as though I needed a vacation—a rest on it. I have canvassed about every subject in all its phases that I could think of that related to car and locomotive painting. Of course it has not all been told yet, by any means, but I felt as though it needed a new broom, and that is the reason I resigned. Of course the compensation is comparatively small and comes kind of slow a good deal of the time; yet it has been a labor of love for me. I don't know

hardly what I shall do without it. I have not tried that yet. I am afraid I shall be apt to get at it before I am aware of it. I think Mr. Pitard would serve you well. I think you had better try him for a year, and if he makes a failure of it, if my health holds out, I will come to his rescue a year hence. I think I am due for a year's vacation in this matter. My duties have increased, and are still increasing in the railroad I represent. I also have another office which I hold, which I intend to throw up at the next annual meeting. For six years I have held the presidency of the Boston and Maine Relief Association, of about 2,000 members. It pays death benefits of a thousand dollars, and six dollars a week sick benefits. There is no salary attached to it whatever, and it has been quite a burden to me, and that position I intend to resign in January. Of course I will not see this association suffer for anything that I can do for it while life holds out, and I do not think it is in any such condition. If anyone else has not done it, I will second the nomination of Mr. Pitard for the editor for the year to come. If at the end of that time he wants to throw it up, and if nobody fills it at the end of the year, I will come to his rescue.

PRESIDENT LANFERSIEK: It has been moved and seconded that the association request Mr. J. H. Pitard to act as the editor for this association in the Railway Master Mechanic.

The motion was carried.

PRESIDENT LANFERSIEK: I will request the secretary to notify the proprietor of the Master Railway Mechanic of our action in this matter.

MR. PITARD: Mr. President and Gentlemen of the convention: I desire to thank you for the honor you have just conferred upon me. I fully realize what the work involves, and I do not believe that any man who has never undertaken such work can fully appreciate what the work involves. I will endeavor to serve the best interests of this association to the fullest extent of my ability, but in so doing I want your help. I want the help of every member of this association. We want to make it as interesting as possible. We can use the official organ for anything on the discussion of questions which we could not discuss here in convention, for the reason that we do not have the time, but now if you should receive a letter from me—and do not wait for me to ask you—but if you should receive a letter, requesting an article from you on this or that subject, I hope you will respond cheerfully. If your writing is not in the shape you would like to see it appear in the organ, just give me the substance of your thoughts, and we will fix up the balance, but do not hesitate. In that way I think we can increase the interest of all the members of our association.

While I am speaking, I think you will all agree with me that Mr. Copp, my predecessor, has served the association well. I think it has been benefitted by his labors. I think you will agree with me in that, and I think it is but fitting that we should show our appreciation of his services in a proper manner. And that I propose to do by the vote of this convention. So I make the motion that we tender to Mr. Copp a vote of thanks for his labors in the past in this direction.

MR. HUTCHINSON: As a member from the other side of the line, I take extreme pleasure in seconding that motion.

PRESIDENT LANFERSIEK: We will make it a rising vote. The gentlemen will please rise.

The entire convention arose in voting on the motion.

MR. COPP: Gentlemen, I appreciate your action most heartily, and it touches me most deeply. You have honored me with repeated election as your president, but this touches me most of all, and I thank you heartily.

PRESIDENT LANFERSIEK: We have the report of the Committee on Next Place of Meeting, so I will ask Mr. Miller to read it in the absence of the secretary.

The report was read as follows, the committee recommending New York, Washington and St. Louis.

REPORT OF COMMITTEE ON NEXT PLACE OF MEETING.

To the President and members of the Master Car and Locomotive Painters' Association.

We, the committee appointed on the next place of meeting, beg to report as follows:

New York, N. Y.; Washington, D. C.; St. Louis, Mo.

We further recommend that members be permitted to suggest such other places as they may desire, and that in balloting, the place receiving the lowest ballot be dropped after each succeeding ballot, until a majority vote is reached.

D. A. LITTLE, Chairman,

T. J. RODABAUGH,

J. H. PITARD, Committee.

MR. BRUNING: I offer Indianapolis.

MR. SHORE: To all those who are going on the excursion to Buffalo, I will say that the tickets will be handed out about twelve o'clock; the train will leave at three o'clock this afternoon, and they will have cars so that we will all be together. You can return any time you desire, and those who do not want to return will be kind enough to give me back the return ticket. Mr. Ball, the superintendent of motive power, has been very kind to us, in making this offer, and we want to see that you will all have a good time.

PRESIDENT LANFERSIEK: Before we proceed to further business, I would like to say that I am requested by the chairman of the Supplymen's Committee to announce that all those who will not leave town before 2:30 are invited to go to Luna Park in a special conveyance at 2:30 sharp.

Assistant Secretary Dane announced that the cities thus far nominated for the next place of meeting were New York, Washington, St. Louis, Indianapolis and Toronto.

MR. COOK: I would like to suggest Saratoga.

MR. BISHOP: I would suggest Denver.

PRESIDENT LANFERSIEK: Any other suggestions? If not, we will proceed to ballot for the next place of meeting. I will appoint as tellers, Messrs. D. A. Little and B. E. Miller.

Upon motion of Mr. Copp, duly seconded, the report of the Committee on Next Place of Meeting was accepted.

MR. GOHEN, at this point, made the following remarks with reference to Secretary McKeon:

Mr. McKeon's daughter is here, and I have asked her how her father was. She said he was somewhat better, but she could not say how long he would live; he was in a very bad

state, and she came here for the purpose of saying, or have some one tell the members of the association that neither her father nor herself wish to accept the secretaryship of this association. I said, "Now, Mrs. Farrell, that is none of your business. This association has decided to keep Mr. McKeon as the secretary of this association just so long as he lives, and when he dies, we have got a man to take his place." She said, "Mr. Gohen, that is all right, but neither father nor myself feel we would like to accept the position unless we did the work." I said, "You must do the work until your father dies; you go right along and do whatever there is to do." I did not tell her I supposed there would be very little to do. I said, "You probably have been doing the work for three or four years," and she said, "Yes." "Now," I said, "You go ahead with that work as long as your father lives, and when he dies, it will be taken away from you and given to Mr. Dane." She said, "I would take it as a compliment the association paid to my father, and under those conditions, I would accept." I told her she could feel perfectly satisfied, we would expect her to do the work as long as her father lived. Under those conditions she was willing to take it. She said she had the money to turn over. I said, "No, you don't do that." I said, "Your father is secretary and treasurer of this association and until your father dies nobody handles that money but your father. You can rest assured of that. This association feels that money is just as safe there as in the bank." While on this matter, she said, one thing in particular that brought me down here was, if you will examine last year's report, you will find a discrepancy in the financial report. There was an item of \$3.35 which was paid to Mr. Cook for typewriting or something, which was in the original report, but in the printed report that item of \$3.35 paid to Mr. Cook was omitted by the printer. While the footing shows the exact balance as upon the original report, there is a discrepancy in the adding up. The balance is right, but there was one item omitted. I told her she could feel perfectly satisfied, and that this association would leave the matter in her hands so long as her father lived. I don't believe I made a mistake in telling her that, did I?"

(Cries of "No.")

At this point the tellers reported the result of the first ballot on the place of next meeting, as follows:

Washington	26	Indianapolis	7
New York	7	Saratoga	6
St. Louis	4	Denver	17
Toronto	12		

No city having received a majority of all the votes cast, it was necessary to take another ballot.

Mr. Pitard moved that the two cities receiving the smallest number of votes be dropped from the ticket.

The motion was seconded and carried.

Saratoga and St. Louis were therefore dropped.

Mr. Sheerin moved that Indianapolis be dropped from the ticket.

The motion was seconded and carried.

The convention then proceeded to vote upon Washington, New York, Denver and Toronto.

MR. GOHEN: Gentlemen: It has been our custom for a number of years at the opening of the convention to have a minister come here and open the proceedings with prayer. I do not know what is the custom with other people. Of course it would be too cold-blooded to offer him some money, but I think there ought to be something given to the gentleman who so kindly came here, and I move you, Mr. President, that the assistant secretary procure a single souvenir of some kind for the Rev. Mr. Foote, that it be sent to him with the compliments of this association, and that an order be drawn on the treasurer for the amount of the souvenir.

The motion was seconded.

MR. BUTTS: I agree with the sentiment, but would like to make an amendment to the motion, that, instead of making it an actual souvenir, you call it a souvenir, and let the souvenir be money. I have never known of any minister having a surplus of funds to be used, and I do not believe he would take any offence whatever, if it were put in the proper light. Call it a souvenir, but let it be money.

MR. GOHEN: I will accept that amendment.

It was agreed that an order be drawn on the treasurer for the amount of \$5.00 for the Rev. Mr. Foote.

MR. DANE: With regard to this matter of the secretary and treasurer as it has been presented here this morning, my feelings are just the same as Brother McKeon and his daughter. I do not care to be the assistant secretary of this association with no labors to perform, even with a remuneration, and for this reason, if the suggestion that Mr. Gohen has given you in regard to the disposition of the funds that have been received in this association, the work of the secretary and all that, is accepted, I shall certainly be obliged to resign the position of assistant secretary and treasurer, having the very best feelings and friendship for Brother McKeon, and hoping with all that he will recover and be our secretary and treasurer for years to come, but gentlemen, I feel I must decline to take the position you have offered and elected me to, under the circumstances.

MR. BAILEY: We have got a secretary that is unable to perform his duties, and in that case we have elected an assistant. This association or Mr. Gohen, or any individual member of this association has no business to delegate his business to anybody else. It falls wholly to the assistant secretary to perform the duties in case of the disability of the secretary.

MR. BROWN: It is the law and order of every organization that has ever been created and still exists, that in case of the absence or sickness or death, or otherwise, the assistant secretary shall perform the duties fully in everything. If I were capable, I would never take a position under any such circumstances whatever.

MR. GOHEN: While that is true, yet there is a little bit of sentiment in this thing with me. Here is a man, as I said the other day, who kept our association alive when it was on its last legs. Now, there are some corporations in this country who are so cold-blooded that when a man gets old and decrepit, they let him go. They do not think of his past service. Do not let that be said of this association.

MR. DANE: This association has acted honorably, I think, in regard to this matter. We have tendered Mr. McKeon the secretaryship and treasurership as long as he lives, with remuneration. If he is unable to perform the duties, that has already been provided for. We do not turn him out. We all love him. For that very reason we object to anybody else but the assistant secretary doing the work. I do not think we are casting any reflection on Mr. McKeon. It is a matter of courtesy.

MR. BROWN: I fully hold that it should be the assistant secretary's duties to carry on the whole business and receive a salary, and if my good Brother McKeon should be in need—and I would not want him to be very much needy—I am the chap that has got a ten-dollar note, and more than that, if he should need it.

MR. COPP: I cannot help but think that you have been making a serious mistake. I thought so when you took the ballot, although I did not speak of it, but wanted to. I fully agree in what Mr. Bailey said when the question of the election of the secretary came up. I also fully agreed with what Mr. Gohen said. I do believe we should separate business from sentiment in this question. Of course it is too late to reconsider; you cannot reconsider a ballot. I think this association should have passed some good resolution on the spot and have gone to work and elected a secretary who was able to do the work. That is my position in the matter. You have elected him in violation of your constitution for two or three years already.

MR. GOHEN: In what way, Mr. Copp?

MR. COPP: Because he is not an active member. A man who is not an active member shall not hold office in this association. His daughter has no more right to perform the duties of secretary in his disability than the daughter of Mr. Lanfersiek, or Mr. Butts' son, when you come to that. At the time the ballot was taken it was uncertain whether the man was alive or not. He was not present to accept or decline. I think it was carrying sentiment too far. I think I have got the heart to feel as much sentiment as any other man, and I think I love Mr. McKeon as much as any other man, and will put my hand in my pocket, as I have done every time a collection has been taken for him, but I believe in business, as well as sentiment, and I think Mr. Dane, who has done the work for two or three years without any compensation whatever, not even the thanks of this association, should be put on the right footing now and be allowed to perform the work of this association.

MR. HUTCHINSON: Another thing I think the members ought to remember—I agree with Mr. Copp as far as sentiment is concerned. If Mr. McKeon—and we all love him—were to leave us today, the question for us to consider would be, is his daughter sufficiently familiar—even if it were customary—with the matters of this association, for her to satisfactorily perform the duties?

MR. GOHEN: Miss McKeon is able to perform the duties, and has been for four years, but in order to settle the thing, I am authorized to tender Mr. McKeon's resignation as secretary and treasurer of this association. Now take it.

MR. COPP: I move that it be accepted.

The motion was seconded and carried.

PRESIDENT LANFERSIEK: I will say that under the conditions which we elected the assistant secretary, he will accede to the secretaryship. I think it would be well for him to procure the funds in Mr. McKeon's hands, because if he should die today, we do not know how long it would take to get those funds. The estate would be placed in the hands of an administrator, and it would probably take two or three years.

MR. GOHEN: I move you that a committee be appointed to audit the secretary and treasurer's accounts before that money is turned over, and that it should be done immediately. The money is available within twenty minutes. That committee should be appointed immediately and audit the accounts.

PRESIDENT LANFERSIEK: I will appoint as that committee Messrs. Copp, Bailey and Cook.

MR. BAILEY: I think this association should give Mr. McKeon some suitable present, something that will be an heirloom. How to do it, or who shall do it, I leave that to someone else, but I hope some action will be taken toward giving him some suitable present.

PRESIDENT LANFERSIEK: I would suggest that the committee appointed to audit the accounts, if they find them correct, they be authorized to procure a suitable memento.

MR. COPP: How would it do to have a set of resolutions adopted, engrossed in the best possible manner, framed and presented to Mr. McKeon. You cannot make them too strong for me.

PRESIDENT LANFERSIEK: If there is no objection, that matter will be left with the Auditing Committee.

At this point the tellers announced the result of the second ballot, as follows:

Washington	36	Denver	21
New York	6		—
Toronto	24	Total	87

Neither city having received a majority of all the votes cast, it was necessary to take another ballot. New York and Denver, being the two cities receiving the smallest number of votes, were dropped from the voting list.

PRESIDENT LANFERSIEK: I will now ask the secretary to read the names of those who have become members of this association at this convention.

LIST OF NEW MEMBERS.

Active members:

W. H. Baldwin (re-instated), Texas & Pacific Ry., Marshall, Texas.

E. S. Butcher, Ft. W. & Denver City R. R., Childress, Texas.

Harry Ball, T. W. V. & O. R. R., Columbus, Ohio.

A. J. Bush, D. & H. R. R., Oneata, N. Y.

W. H. Burton, Southern Ry., Spencer, N. C.

Geo. Durnbaugh, L. S. & M. S. Ry., Collinwood, Ohio.

A. C. Everist, Iowa Central Ry., Marshalltown, Iowa.

William Kreuger.

J. F. Moore, Erie R. R., Cleveland, Ohio.

A. C. Moxey, Standard Steel Co., Butler, Pa.

F. C. Macomber, Pere Marquette R. R., Muskegon, Mich.

Edward Mathews, D. & A. A. A. & J. Ry., Ypsilanti, Mich.

John F. Roscoe, I. & G. N. Ry., Palestine, Texas.

L. G. Smith, C. C. C. & St. L., Wabash, Ind.

C. O. Smith, Bessemer R. R., Greenville, Pa.

O. P. Wilkins, N. & W. Ry., Roanoke, Va.

E. C. Woodruff, Pullman Co., Pullman, Ill.

Associate members:

E. L. Aquart, Aquart Eureka Comp., St. Louis, Mo.

H. G. Kittredge, Kay & Ess Co., Dayton, Ohio.

PRESIDENT LANFERSIEK: I welcome to this association the names of the members just read, and hope they have been enlightened to some extent at least, and also hope they will be present with us at future conventions.

We will now have the report of the Committee on Resolutions.

Mr. Wright, chairman of the committee, presented the following report:

REPORT OF COMMITTEE ON RESOLUTIONS.

To the President and members of the Master Car and Locomotive Painters' Association, assembled.

Gentlemen: Your committee on resolutions have to report as follows:

Whereas, The ruler of all things, Almighty God, has in divine wisdom seen fit to remove from our midst during the past year, three of our members, J. P. Waggoner, Henry F. Laidler, George H. Rattenbury.

We bow to the Divine will. Therefore, be it resolved:

(1) That the sympathy of the members of the Master Car and Locomotive Painters' Association be tendered to the families of the deceased members.

(2) That a copy of this resolution be forwarded to the bereaved families. Furthermore, that it be spread upon the minutes of the association.

Whereas, the proceedings of the thirty-sixth annual convention of the Master Car and Locomotive Association have been most beneficial and enjoyable to all present, we desire to express our high appreciation of the efforts of all who have in any way contributed to its success. Therefore, be it resolved:

(1) That the thanks of the members of the association are hereby tendered to the president and all other officers of the association for their efficient and self-sacrificing services.

(2) To Mayor Johnson of Cleveland for favoring us with his presence and welcoming us to this beautiful city.

(3) Also to the chairman and members of the various committees for the manner in which they have performed their duties.

(4) To all those who have prepared papers on the various subjects presented at this convention.

(5) To the ladies, who, by their presence and influence, have added so much to the refinement and happiness of the occasion.

(6) To the supply men, particularly the workers on the entertainment committee and the local manufacturers, who have provided entertainment of so refined and pleasant a character.

(7) To Mr. Ball and the Lake Shore and Michigan Southern R. R. for courtesies extended to those wishing to visit Buffalo and Niagara Falls.

(8) To the Sherwin and Williams Co. for the instructive trip through their factory.

(9) To the proprietors of the "Hollenden," the headquarters of the convention, for their efforts in our behalf.

(10) That the above be made part of the records of the association, and that the secretary be instructed to send a copy of this resolution to those interested, who are not members of the association.

In addition to the above resolutions we would recommend that an expression of sympathy be tendered to Mr. Robert McKeon, ex-secretary of the association, also to Mr. F. S. Ball, ex-president and one of our most active members, both of whom were unable to be present at this convention on account of ill health.

J. D. WRIGHT, Chairman,
J. J. SHEERIN,
EUGENE LAING,

Committee.

Upon motion, duly seconded, the report of the committee was adopted.

At this point the tellers announced the result of the third ballot on next place of meeting, as follows:

Washington 41 Toronto 46

PRESIDENT LANFERSIEK: Toronto having received a majority of all the votes cast I declare this association has selected Toronto for their next meeting, in 1906.

Gentlemen: I believe this concludes the business for the meeting of 1905, and we are now about to enter upon the closing ceremonies. I desire that the ladies be called in at this time.

(The ladies at this point entered the room.)

PRESIDENT LANFERSIEK: It now becomes my last duty as the presiding officer to install the officers for the ensuing year, and before that duty is performed I desire to say to the members of this association that I feel very grateful for the confidence they have imposed in me, and for the kind and courteous treatment they have given me. I shall always have a warm spot in my heart for the Master Car and Locomotive Painters' Association of the United States and Canada, and I will endeavor at all times to do my best to advance its interests. Gentlemen, I thank you.

I will ask Mr. Miller and Mr. Orr to escort the newly-elected president to the chair.

(Upon Mr. Butts taking the chair)—

PRESIDENT LANFERSIEK: Mr. Butts, you have been elected president of this association. Your duty is to preside over its destinies during the coming year, and that you may be properly equipped to perform the arduous duties which will become your part during the coming year, I have the honor to turn over to you this gavel, presented to this association during this convention by our fellow member, Sam Brown. It is made of a part of the flagstaff of that famous Admiral Dewey's flagship "Olympia," when she was so nobly defending the honor and integrity of this great Republic, in

Manila Bay, on that memorable Sunday morning, May 1st, 1898. Accept it, use it with firmness, but with discretion; it is the emblem of your authority, and I now welcome you to your seat. (Loud applause.)

PRESIDENT BUTTS: Mr. President and members one and all: I thank you heartily for the honor that you have conferred upon me. I am not unmindful of the responsibility you have placed upon me, but I assure you that I will do my best to serve you impartially. I take this position with fear and trembling, for fear that I may not be able to anywhere near measure up to the ability of the man who has so ably presided over our sessions and our association for the past year. This is your society; I am simply placed here as the executive head. I want you to feel at all times that you can approach me and consult with me on any matter pertaining to the interests of this association, for upon your support I shall depend for success, and without your support certainly it will be a failure, because it is not within the province of the president to do anything but to carry out your will. This I shall endeavor to do to the best of my ability. I thank you one and all.

MR. LANFERSIEK: Mr. Cook and Mr. Pitard will please conduct the first vice-president to the chair.

(Upon Mr. Kahler being escorted to his seat)—

MR. LANFERSIEK: You have been selected as the first vice-president of this association. Your duty is to assist the president and preside during his absence. I welcome you to your chair.

FIRST VICE-PRESIDENT KAHLER: Mr. President and fellow members: I feel very grateful to you for the high honor you have bestowed upon me in electing me to this office. It is something I never aspired to. I rather preferred to remain in the ranks and to help do the hard work, but I will pledge you my support in the future, as I have done in the past. I thank you.

MR. LANFERSIEK: I will ask Mr. Cook and Mr. Pitard to conduct the second vice-president to the chair.

(Upon Mr. Houser being escorted to his chair)—

MR. LANFERSIEK: Mr. Houser, you have been elected second vice-president of this association. Your duty is to assist the first vice-president and president in their duties, and in their absence you are to preside. I welcome you to your chair.

SECOND VICE-PRESIDENT HOUSER: Mr. President and gentlemen: I cannot help but feel, in thanking you, that there has been an error made in my election. I did not aspire to the honor, which I consider a very great one. Like Mr. Kahler, I believe I should have remained in the ranks, but I will endeavor to do my very best in advancing the interests of the association, and in assisting the president and vice-president in whatever duties I can perform. I thank you.

MR. LANFERSIEK: I will ask Mr. Quest and Mr. Miller to conduct the secretary to his station.

(Upon Mr. Dane being escorted to his chair)—

MR. LANFERSIEK: Mr. Dane, you have been elected secretary of this association for the ensuing year. It is your duty to keep a correct record of the proceedings of this associa-

tion, receive all moneys, and pay them out only on orders of this association. I welcome you to your station.

SECRETARY DANE: Mr. President, gentlemen and ladies: It gives me great pleasure to be selected for this honorable position of trust. I assure you I accept it reluctantly, though, on account of our beloved ex-secretary and treasurer, who has been with the association some 32 or 33 years, through illness is obliged to retire. We all feel very kindly toward him and hope that he may be spared to us many years to come as an associate member. I shall endeavor, Mr. President and gentlemen, to fill the place now vacated by Mr. McKeon, to the best of my ability. If any errors arise, they must be counted errors of judgment and not of the heart. I thank you again for the honor that has been conferred upon me.

MR. LANFERSIEK: I now declare the newly-elected officers to serve for the year 1906 duly installed, and with that ends my administration of the business of this association. Gentlemen, I thank you. (Applause.)

PRESIDENT BUTTS: The first duty devolving upon the incoming President is one that is considered the most important, and that is to appoint the standing committees for the year. We have such a large number of men who are so abundantly competent to serve us in any capacity, that it is a very difficult thing to select only a few to fill these important positions. I want to say that no doubt there will be many members here who may feel that perhaps they have been passed by without consideration. I wish to say that this is certainly not the case. We have done our best to select those whom we think would fill the positions. We wish we had a place for every member of this association. I will now appoint the standing committees for the year:

Advisory Committee: B. F. Miller, A. J. Bruning, J. D. Wright, D. L. Paulus and J. H. Whittington.

Committee on Tests: W. O. Quests, George Warlick, Chris. Clark, G. J. Ginther, S. H. McCracken.

Committee on Information: C. A. Cook, J. H. Pitard, F. W. Bowers, J. G. Kell, Geo. W. Lord.

Hotel Committee: E. L. Richardson, J. J. Hutchinson, Joseph Maycock, A. Gamble.

PRESIDENT BUTTS: It has always been our custom to close the last session of our convention with a little entertainment, but I shall have to make some apology and say that we have not prepared any programme whatever, but still we have some with us that we are always very glad to hear from. You will consequently pardon me if I call upon them without giving them any chance for preparation. We are always glad to hear from Mr. Sam Brown. I do not need to introduce him. When we say "Sam Brown" we always know there is something good coming, and I should like to hear from Mr. Sam Brown.

Mr. Brown responded cheerfully and delivered a very pretty recitation, which was received with loud applause.

Following Mr. Brown, Mrs. Lynch presented a humorous recitation, and upon receiving generous applause, made the following remarks:

It is seldom I respond to encore, but I will do so on an occasion of this kind. Mr. Gohen is a particular friend of

mine, and I want him to get the full benefit of my remarks, and therefore will ask him to kindly take a seat forward. Since coming to these conventions for years it has been a problem to know who is the most popular man. That one question I think has been solved at this convention. Mr. Gohen has endeared himself to the ladies by his beautiful souvenirs this year that we concluded we would kind of hit back at him for once anyhow. Since this is his last appearance among us as a member of the Association, and on behalf of the ladies of the Convention of 1905, I have been selected, and have the honor to present this clock to Mr. Gohen from the ladies of the convention. It only has to be wound up once a year, and if he will bring it every year, some of us will be here to help him wind it up. Mr. Gohen, on behalf of the ladies of the convention of 1905 I leave the clock in your hands (loud applause).

Mr. Gohen arose to respond, but was so overcome by emotion that he was unable for the moment to do so.

PRESIDENT BUTTS: It is customary for the President in addressing any body to say "Gentlemen and Ladies," but in looking over the audience just now I should think it would be far more appropriate that I should say, "ladies and gentlemen," as the ladies are very largely in the majority. Ladies, I want to thank you for your presence. At the opening of this convention I cast my eye over the audience and I said to myself "This convention is going to be a success," and I came to that conclusion from the large number of ladies here. When a man goes away from home and takes his wife with him, we have every reason to believe that he is going to have a good time, and to see so many ladies here warrants that we are all bound to have a good time. I think you will all agree with me, in looking back over the last four days, that my prediction has been verified in every respect. Your presence has strengthened all of us, and I know I voice the sentiment of every body here when I say this. This, I think, concludes all the work of this present session, and I have simply now to announce that our next meeting will be held in Toronto, beginning on the 13th day of September, 1906. I hope to meet you there one and all, and sincerely hope that we shall have as good a time in Toronto as we have had in Cleveland.

Mr. Gohen at this point responded to the presentation address of Mrs. Lynch as follows:

Mr. President, for once I was knocked out, but I have to thank you, and I had better not say much about it. As I told you a day or two ago, this is my last meeting with you as a Master Painter. I have been with you for fifteen years, and I have had many pleasant associations, every one of which I have enjoyed. I have tried to make it pleasant for others. I am leaving my present position with the hope and belief that I am going to do better. I do so much to the regret, I am proud to say, of my people. The people with whom I am associated do not want me to leave, but I felt it was to my interest to do so. I shall meet you every year so long as I live and I hope that our relations, while they may not be so close inside the room, will be just as close as ever outside. I thank you. (Loud applause.)

